

# ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

3

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 08/13/2020		2. CONTRACT NO. (If any) 68HERD19D0001		6. SHIP TO: a. NAME OF CONSIGNEE Office of Research and Development	
3. ORDER NO. 68HERC20F0363		4. REQUISITION/REFERENCE NO. PR-ORD-20-00901		b. STREET ADDRESS US Environmental Protection Agency 109 T.W. Alexander Drive	
5. ISSUING OFFICE (Address correspondence to) CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001		c. CITY Research Triangle Park		d. STATE NC	e. ZIP CODE 27711
7. TO: Susan Mountford		f. SHIP VIA			
a. NAME OF CONTRACTOR Westat, Inc.		8. TYPE OF ORDER <input type="checkbox"/> a. PURCHASE REFERENCE YOUR:   Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.			
b. COMPANY NAME		<input checked="" type="checkbox"/> b. DELIVERY Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.			
c. STREET ADDRESS 1600 RESEARCH BOULEVARD					
d. CITY ROCKVILLE	e. STATE MD	f. ZIP CODE 208503129			
9. ACCOUNTING AND APPROPRIATION DATA See Schedule		10. REQUISITIONING OFFICE			
11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB					12. F.O.B. POINT

13. PLACE OF a. INSPECTION Destination		b. ACCEPTANCE Destination	14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	16. DISCOUNT TERMS
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## 17. SCHEDULE (See reverse for Rejections)

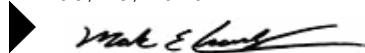
ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 049508120 TOCOR: Michael Nye Max Expire Date: 01/31/2021 Invoice Approver: Michael Nye Alt Invoice App: Edward Hudgens  Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME RTP Finance Center						\$241,471.00
	b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts						\$241,471.00
c. CITY Durham		d. STATE NC	e. ZIP CODE 27711				17(i) GRAND TOTAL

22. UNITED STATES OF

AMERICA BY (Signature)

08/13/2020



ELECTRONIC  
SIGNATURE

23. NAME (Typed)

Mark Cranley

TITLE: CONTRACTING/ORDERING OFFICER

## ORDER FOR SUPPLIES OR SERVICES

PAGE NO

## SCHEDULE - CONTINUATION

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 08/13/2020	CONTRACT NO. 68HERD19D0001	ORDER NO. 68HERC20F0363
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ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0001	Admin Office: CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001 Period of Performance: 08/10/2020 to 01/31/2021  PR to establish Sun Valley Health Benefits TO, Westat 68HERD19D0001 Documenting health benefits of community revitalization at Sun Valley Colorado  Accounting Info: 20-21-C-26D5000-000F84-2532-26A5C-2026 D5E022-008 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000F84 Budget (BOC): 2532 Cost: 26A5C DCN - Line ID: 2026D5E022-008 Funding Flag: Partial Funded: \$50,000.00 Accounting Info: 20-21-C-26D5000-000FK8XPW-2532-26A5C-2 026D5E022-009 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000FK8XPW Budget (BOC): 2532 Cost: 26A5C DCN - Line ID: 2026D5E022-009 Funding Flag: Partial Funded: \$13,470.00 Accounting Info: 20-21-C-26D5000-000FK8XPV-2532-26A5C-2 026D5E022-010 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000FK8XPV Budget (BOC): 2532 Cost: 26A5C DCN - Line ID: 2026D5E022-010 Funding Flag: Partial Funded: \$99,228.73 Accounting Info: 20-21-C-26D5000-000FK6XR2-2532-26A5C-2 026D5E022-011 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000FK6XR2 Budget (BOC): 2532 Cost: 26A5C DCN - Line ID: 2026D5E022-011 Funding Flag: Partial Funded: \$5,306.74 Continued ...				229,941.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$229,941.00

**ORDER FOR SUPPLIES OR SERVICES**  
**SCHEDULE - CONTINUATION**

PAGE NO  
3

**IMPORTANT:** Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 08/13/2020	CONTRACT NO. 68HERD19D0001	ORDER NO. 68HERC20F0363
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ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0002	<p>Accounting Info:  20-21-C-26D5000-000FK8XPV-2532-26A5C-2  026D5E022-012 BFY: 20 EFY: 21 Fund: C  Budget Org: 26D5000 Program (PRC):  000FK8XPV Budget (BOC): 2532 Cost:  26A5C DCN - Line ID: 2026D5E022-012  Funding Flag: Partial  Funded: \$31,935.53</p> <p>Accounting Info:  20-21-C-26D5000-000FK6XR2-2532-26A5C-2  026D5E022-013 BFY: 20 EFY: 21 Fund: C  Budget Org: 26D5000 Program (PRC):  000FK6XR2 Budget (BOC): 2532 Cost:  26A5C DCN - Line ID: 2026D5E022-013  Funding Flag: Partial  Funded: \$30,000.00</p> <p>Travel for TO # 13 under Westat  68HERD19D0001: Sun Valley Health Benefits  Not to Exceed: \$11,530.00.</p> <p>Accounting Info:  20-21-C-26D5000-000FK8XPW-2532-26A5C-2  026D5E022-009 BFY: 20 EFY: 21 Fund: C  Budget Org: 26D5000 Program (PRC):  000FK8XPW Budget (BOC): 2532 Cost:  26A5C DCN - Line ID: 2026D5E022-009  Funding Flag: Complete  Funded: \$11,530.00</p>				11,530.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$11,530.00

## **Documenting health benefits of community revitalization at Sun Valley Colorado**

### **PERFORMANCE WORK STATEMENT Task Order Contract 68HERD19D0001 Task Order TBA**

**Period of Performance: Date of Issuance to January 31, 2021**

**Task Order Contracting Officer's Representative (TOCOR):**

Michael Nye

Phone: 303-312-6986

E-mail: [nye.michael@epa.gov](mailto:nye.michael@epa.gov)

Address: EPA Region 8, 1595 Wynkoop St, ORD Cube 6121, Denver, CO 80202,

**Alternate TOCOR:**

Edward E. Hudgens

Phone: 919-966-0642

E-mail: [hudgens.edward@epa.gov](mailto:hudgens.edward@epa.gov)

**Address for Courier (e.g., overnight delivery) for both:**

Michael Nye

EPA Region 8 1595 Wynkoop St,

ORD Cube 6121,

Denver, CO 80202.

## **I. BACKGROUND**

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Sun Valley and Quigg-Newton are public housing neighborhoods in Denver, Colorado that are operated by Denver Housing Authority (DHA). Demographically, Sun Valley holds the unenviable position as the poorest community in Colorado; it is also the youngest community in this state. As in many other environmental justice communities, Sun Valley residents suffer from a lack of greenspace, increased proximal exposure to contaminated sites, poor indoor and ambient air quality, poor quality housing, poor health, and high crime rates.

Recent efforts to revitalize and sustainably transform underinvested communities have been met with some success. The Sun Valley Transformation Plan and associated Healthy Living Initiative proposes a complete tear down and rebuild/redesign of the neighborhood into an "Eco District" complete with parks and walking paths, new energy efficient housing, a redesigned street pattern to reduce transit and idling times, and new facilities, such as community gardens, athletic fields, and playgrounds. Given the combination of its uniquely disadvantaged and vulnerable demographic profile and the comprehensiveness of the revitalization plans for the neighborhood, Sun Valley represents an unprecedented "real world" research opportunity on the benefits of community revitalization. It is anticipated that the

planned improvements within and immediately surrounding Sun Valley will also lead to improvements in quality of life for residents, particularly in terms of health and well-being. Many of the goals in the Transformation Plan and Healthy Living Initiative are explicitly linked to key health metrics such as rates of obesity or cardiovascular disease, or well-being metrics such as feelings of safety and connections to nature. Sun Valley residents have been extensively involved in the development of the revitalization plans for the neighborhood, and there is widespread optimism among the population and DHA staff that their living conditions and their lives will soon improve. However, important questions remain about where and how much, and why these benefits are likely to accrue – particularly in terms of public health.

The Quigg-Newton community is very similar to Sun Valley in many respects. However, DHA currently has no plans to re-vitalize this community. Therefore, Quigg-Newton was selected as a control community for an epidemiological study that will be conducted by EPA in collaboration with Colorado State University and DHA.

## **II. SCOPE OF WORK**

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This study aims to quantify the subclinical and clinical health benefits of the Sun Valley revitalization “experiment” and to translate this information into clear answers and guidance for decision makers and scientists seeking to design and develop health-focused revitalization programs and initiatives, and/or to better understand how, and how much, neighborhood revitalization will improve public health. It will begin with a pilot phase in which EPA will seek to build trust in both communities, gain interest in the study, and refine questionnaires and study protocols. The pilot study will enroll up to 100 total adults (50 from each community) to provide non-invasive saliva samples which will be analyzed for selected biomarkers of stress, physiological status, and chronic infection. For the purposes of the pilot study, only saliva will be collected. Basic physical examinations will also be conducted. Assuming successful implementation of the pilot stage, we will submit a revised IRB protocol to extend the study to involve all individuals (including children) living in the initially recruited households; add new analytes such as blood and urine; and enroll additional households.

The contractor shall provide support for the pilot effort by undertaking the following activities (see accompanying description and schedule of deliverables in Section III for more information):

- 1) Assist in the development of a Project Quality Assurance Project Plan covering all/ any of the remaining activities listed below that are not already covered under the contract-level QA Plan.
- 2) Assist with recruiting and enrolling into the study up to 50 adult participants from the Sun Valley DHA neighborhood and 50 adults from the Quigg Newton DHA neighborhood. This includes working with DHA and other partners to develop recruitment materials and a recruitment strategy.
- 3) Perform short, basic physical examinations for enrolled participants at a centralized location in each neighborhood, ensure completion of an aligned health questionnaire, and disseminate associated instructional materials
- 4) Log completed saliva

collection kits received from each participant, ensure completion of a post sampling questionnaire, and pay compensation to enrolled participants who complete the study. 5) Put in place QA measures and develop messaging and information strategies to ensure that participants follow the study protocol and take saliva samples at the appropriate time. 6) Track samples and ensure sample quality and timely delivery of samples to lab for analysis. 8) Assemble a dataset containing questionnaire responses

Each of these activities is listed as a separate deliverable under section III with associated progress reports or milestones.

### **Monthly Progress Reports**

The Contractor shall provide monthly progress reports with a description of work progress to date, any Quality Assurance issues, and the corrective actions they took to resolve these issues.

### **Quality Assurance Project Plan (QAPP)**

EPA policy requires that an approved Quality Assurance Project Plan (QAPP) be in place before any work begins that involves the collection, generation, evaluation, analysis or use of environmental data. Tasks in this work assignment require a Project Specific Quality Assurance Project Plan (PQAPP). Consistent with the Agency's QA requirements, the contractor does not need to supplement the Contract Quality Assurance Project Plan (QAPP) but will need to prepare a Project Specific Quality Assurance Project Plan (PQAPP) for any activities not covered in the Contract Quality Assurance Project Plan. EPA will provide the contractor with approved SOPs which shall be used as the basis of the PQAPP.

## **III. DELIVERABLES AND SCHEDULE**

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The following deliverables are included in this Task Order as described in Section II.

1. **Develop a Project Quality Assurance Project Plan covering all/ any data collection or analysis activities that are not already covered under the contract-level QA Plan.** The Contractor shall deliver the written PQAPP no more than 15 working days after acceptance of this TO. EPA will provide the contractor with approved SOPs which shall be used as the basis of the PQAPP.
2. **Assist with developing recruitment materials and strategy.** Enrolling a sufficient number of participants to prove the efficacy of the wider study is crucial for the success of this pilot effort. An effective recruitment strategy that will achieve the maximum number of participants requires working with and through local partners who already have the trust of neighborhood residents. The Contractor shall work closely with representatives from EPA, DHA and other study partners (Colorado State University and Colorado School of Public Health at the University of Colorado) to develop an effective, multi-lingual recruitment strategy and package of appropriate recruitment materials for Sun Valley and Quigg Newton. It is assumed that the contractor can operate from a fixed base to perform the

majority of recruitment strategy and materials development. Local work/ meeting space will be provided by project partners as needed. The Contractor shall deliver written documentation of the recruitment strategy and drafts of associated flyers or other recruitment materials within 90 calendar days of acceptance of this TO. It is assumed that DHA will provide translation services in at least 2 languages (tbd) as in-kind support for this project, but some additional formatting may be required by the contractor for translated materials. Care should be taken to develop English-language recruitment materials that leave enough page space to allow for translation into non-Roman alphabets that may require larger font size or changes in margins, text orientation etc.

Actual enrollment of participants, including obtaining consent forms, will be undertaken by EPA and DHA staff at a time and location agreed in consultation with the Contractor and the recruitment strategy/ materials. EPA will provide test kits and any other necessary materials on the basis of the number of enrollees (hereafter: participants). 4 SalivaBio test kits will be provided for each participant by EPA. At its discretion, EPA may also provide a single OraCol sampling kit for SARS-CoV-2 antibodies for each participant, which can be self-administered by participants at the same time as SalivaBio sampling. EPA will also provide multi-lingual health questionnaires and post-sampling questionnaires for participants. The questionnaires will be distributed to participants at time of enrollment. EPA will provide contact details for enrolled participants to the contractor for use in tasks 3-7.

3. **Ensure completion of the health questionnaire, perform basic physical examinations for enrolled participants in each location, and distribute associated instructional materials to participants.** The first step in the study involves ensuring completion of the baseline health questionnaire. The EPA will provide the questionnaire forms at enrollment in multiple languages consistent with the languages used for recruitment and it is expected that most of the participants will have completed these already during enrollment. The Contractor only needs to ensure that each participant has completed, or if necessary, completes, the health questionnaire prior to the physical exam. DHA will provide any translation services necessary at this stage, but the surveys will have clear instructions in the chosen language and completion should be straightforward. The Contractor shall then perform a basic, non-technical physical exam consisting of height, weight, resting heart rate, and blood pressure. No other tests such as spirometry or blood draws are needed. DHA will provide appropriate private space for the examination at a central location in each neighborhood. The questionnaire and exam must be completed for each participant before any saliva samples are taken and should be completed as close to sample collection as possible. During this stage, the contractor shall distribute the 4 saliva collection kits (and antibody test kit if EPA decides to use them for this study) to each participant along with written, multi-lingual instructions on how and when to use them (See Deliverable 5). This work can be performed on a rolling basis concurrent with the activities in Deliverable 4.
4. **Receive and log saliva test kits from each participant and ensure completion of the post-sampling questionnaire.** All samples have to be frozen immediately after they are taken.

The contractor shall work with DHA to set up a central location for sample receipt/ logging where participants can bring their frozen samples after completion at agreed-upon times (i.e. Monday, Wednesday, and Friday from 3-6PM). It is envisioned that sample collection will occur in waves over a period of 4-6 weeks concurrent with other activities specified in this TO. Participants should also complete a short questionnaire about their experience with the study, and these shall be collected with the sample test kits. EPA will provide a multi-lingual questionnaire for this purpose and these will be distributed at time of enrollment. As with the health survey, DHA will provide translation services if needed and the instructions will be straightforward in the chosen language. The contractor only needs to ensure that participants return a completed post-sampling questionnaire with their test kits, or that they complete a questionnaire at the time they return their test kits.

5. **Put in place QA measures and develop messaging and information strategies to ensure that participants follow the study protocol and take samples at the appropriate time.** The contractor shall take reasonable steps to ensure that participants follow the guidelines of the study and take samples at the appropriate time. This includes developing appropriate, multi-lingual materials in English and working with DHA's translators to format these materials in one or two other languages to instruct enrolled participants on how and when to properly collect samples. Participants will need to take a total of 4 samples at 3-hour intervals during a single day (24 hour period). The first sample must be taken no less than 30 minutes after waking. Additional measures, for example sending texts to check in with, or prompt participants to take samples, or incentivizing participants to check in after each sample is taken could also be considered. Samples must be frozen immediately after they are taken in the participant's home freezer. Due to the labor-intensive nature of this work, and the work in task 4, EPA considers it highly likely that Contractor staff or designees will need to be on site often and available during business hours in the two communities while sampling is taking place. The Contractor shall furnish a written summary of proposed measures within 60 calendar days of accepting this TO. Draft materials for participants shall be furnished within 90 calendar days of acceptance of this TO at the same time as the materials furnished for Deliverable 2.
6. **Track samples and ensure sample quality and timely delivery of samples to lab for analysis.** The contractor shall clearly log, label, track and ship samples to EPA's designated lab for analysis. Samples will need to be kept frozen and shipped to EPA laboratory in Chapel Hill, NC in bulk batches in insulated containers with dry ice. A single, bulk shipment will suffice if necessary given the small sample size for this project. Associated protocols should be spelled out clearly in the PQAPP or Contract Level QAPP.
7. **Pay compensation to enrolled participants in both locations.** Each participant will be given an incentive for their participation in the study in the amount of \$75. Compensation could also be linked to QA activities such as agreeing to receive text messages to prompt sampling. Payment of the incentive shall occur concurrently with Task 4 upon completion of the post-survey questionnaire and receipt of the test kits.
8. **Assemble and deliver an Excel dataset containing the results of the enrollment and complete questionnaires.** Rows shall represent individual cases and columns responses to survey questions.



Special reporting requirements include documentation of all sources and contacts to fully reference the sources of all information. In addition to the deliverables specified for each task above, the Contractor shall prepare a final report summarizing all analyses, recommendations, reports, or comments provided during the Period of Performance of this Task Order. The final report shall provide documentation for any electronic data sets that may have been generated. Updated versions of any amended databases, data dictionaries, data sets, programs or documents, as well as all graphics and tables generated under this Task Order, are due at the completion of the TO and in a format that has been approved by the EPA. Copies of the monthly reports, conference call agendas and the agreed upon action items shall be included as documentation of the Task's and the overall TO course and progress. All programming documentation is due at the end of this TO. This includes copies of all statistical programs, statistical code and/or logs of output. The EPA may require the Contractor to provide the programming code used for specific data analysis or quality assurance tasks prior to the end of the TO or Period of Performance (POP) for EPA review and QA activities.

All deliverables shall be provided to the TOCOR electronically in accordance with the timeframes specified in Table 1. Electronic files shall be provided in PDF and in the original software. The contractor shall use Microsoft Office and Adobe Acrobat (online version) software for developing all electronic copies of deliverables. All documents to be posted on EPA's website shall be web-ready and 508 compliant. Files submitted on CD or DVD shall have an accompanying Table of Contents in a format that has been approved by the EPA.

**Table 1. Schedule of Benchmarks and Deliverables**

#	DELIVERABLE	DUE DATE
0.	Monthly Progress Reports	Monthly, as specified in the contract
1.	Develop a Project Quality Assurance Project Plan covering all/ any data collection or analysis activities that are not already covered under the contract-level QA Plan	No more than 15 working days after acceptance of this TO.
2.	Assist with developing recruitment materials and strategy	Recruitment strategy and drafts of materials: within 90 calendar days of acceptance of this TO.
3.	Ensure completion of the health questionnaire, perform basic physical examinations (as defined above) for enrolled participants in each location, and distribute associated instructional materials to participants	No later than 12/31/20.
4.	Receive and log saliva test kits from each participant and	No later than 12/31/20.

	ensure completion of the post-sampling questionnaire	
5.	Put in place QA measures and develop messaging and information strategies to ensure that participants follow the study protocol and take samples at the appropriate time	Written summary of proposed measures within 90 calendar days of accepting this TO.  Draft materials for participants within 90 calendar days of acceptance of this TO (at the same time as the materials furnished for Deliverable 2).
6.	Track samples and ensure sample quality and timely delivery of samples to lab for analysis.	No later than 12/31/20.
7.	Pay compensation to enrolled participants in both locations	No later than 12/31/20.
8.	Deliver completed questionnaire datasets	No later than 1/31/21

#### **IV. REPORTING**

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All documentation and reporting under this TO shall be in accordance with contract requirements.

#### **V. TRAVEL**

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The EPA Anticipates that travel may be required for this TO. If Travel is required, then it shall be allowable only in accordance with the limitations of FAR 31.205-43 and FAR 31.205-46 and must be approved by the EPA TOPO prior to travel taking place.

#### **VI. CONTRACTOR IDENTIFICATION**

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Contractor personnel shall always identify themselves as Contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative.

The Contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the TOCOR.

#### **VII. NOTICE REGARDING GUIDANCE PROVIDED UNDER THIS TASK ORDER**

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The Contractor shall not engage in activities of an inherently governmental nature such as the following:

- (1) Formulation of Agency policy
- (2) Selection of Agency priorities
- (3) Development of Agency regulations

Should the Contractor receive any instruction from an EPA staff person that the Contractor ascertains to fall into any of these categories or goes beyond the scope of the contract or TO, the Contractor shall immediately contact the EPA TOCOR or the CO.

#### **VIII. PERIOD OF PERFORMANCE**

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This TO will start on the date the Contracting Officer's signature and extend through January 31, 2021.

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE		PAGE OF PAGES 1 3	
2. AMENDMENT/MODIFICATION NO. P00001		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
6. ISSUED BY CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001		CODE CAD		7. ADMINISTERED BY (If other than Item 6)		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  Westat, Inc. Attn: Susan Mountford 1600 RESEARCH BOULEVARD ROCKVILLE MD 208503129				(x)		9A. AMENDMENT OF SOLICITATION NO.	
				(x)		9B. DATED (SEE ITEM 11)	
				x		10A. MODIFICATION OF CONTRACT/ORDER NO. 68HERD19D0001 68HERC20F0363	
				x		10B. DATED (SEE ITEM 13) 08/13/2020	
CODE 049508120		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Schedule <span style="float: right;">Net Decrease: -\$166,471.00</span>							
<b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
X	D. OTHER (Specify type of modification and authority) Unilateral - Administrative Action						
<b>E. IMPORTANT:</b> Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
DUNS Number: 049508120 TOCOR: Michael Nye Max Expire Date: 01/31/2021 Invoice Approver: Michael Nye Alt Invoice App: Edward Hudgens  The purpose of this modification is to correct an accounting discrepancy resulting from duplicate lines of accounting on the base award. This fix mod deobligates funding in the amount of \$166,471.00 from Funding IDs 1-16 through 1-19.							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Mark Cranley			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
_____ (Signature of person authorized to sign)				_____ (Signature of Contracting Officer)			


<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED 68HERD19D0001/68HERC20F0363/P00001	PAGE	OF
		2	3

NAME OF OFFEROR OR CONTRACTOR  
Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>LIST OF CHANGES:</p> <p>Reason for Modification: Funding Only Action</p> <p>Total Amount for this Modification: -\$166,471.00</p> <p>New Total Amount for this Version: \$63,470.00</p> <p>New Total Amount for this Award: \$75,000.00</p> <p>Obligated Amount for this Modification:</p> <p>-\$166,471.00</p> <p>New Total Obligated Amount for this Award:</p> <p>\$75,000.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 1</p> <p>Total Amount changed</p> <p>from \$229,941.00 to \$63,470.00</p> <p>Obligated Amount for this Modification:</p> <p>-\$166,471.00</p> <p>CHANGES FOR DELIVERY LOCATION: ORD RTP</p> <p>Amount changed from \$229,941.00 to \$63,470.00</p> <p>CHANGES FOR ACCOUNTING CODE:</p> <p>20-21-C-26D5000-000FK8XPV-2532-26A5C-2026D5E022-010</p> <p>Amount changed from \$99,228.73 to \$0.00</p> <p>Percent changed from 43.154 to 0</p> <p>CHANGES FOR ACCOUNTING CODE:</p> <p>20-21-C-26D5000-000FK6XR2-2532-26A5C-2026D5E022-011</p> <p>Amount changed from \$5,306.74 to \$0.00</p> <p>Percent changed from 2.30787 to 0</p> <p>CHANGES FOR ACCOUNTING CODE:</p> <p>20-21-C-26D5000-000FK8XPV-2532-26A5C-2026D5E022-012</p> <p>Amount changed from \$31,935.53 to \$0.00</p> <p>Percent changed from 13.88858 to 0</p> <p>CHANGES FOR ACCOUNTING CODE:</p> <p>20-21-C-26D5000-000FK6XR2-2532-26A5C-2026D5E022-013</p> <p>Amount changed from \$30,000.00 to \$0.00</p> <p>Percent changed from 13.04683 to 0</p> <p>Continued ...</p>				

NAME OF OFFEROR OR CONTRACTOR  
Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 Period of Performance: 08/10/2020 to 01/31/2021				

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE		PAGE OF PAGES	
						1 7	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00002		See Block 16C		PR-ORD-20-00901			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
CAD							
US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x) 9A. AMENDMENT OF SOLICITATION NO.			
Westat, Inc. Attn: Susan Mountford 1600 RESEARCH BOULEVARD ROCKVILLE MD 208503129							
				9B. DATED (SEE ITEM 11)			
				x 10A. MODIFICATION OF CONTRACT/ORDER NO.			
				68HERD19D0001			
				68HERC20F0363			
				10B. DATED (SEE ITEM 13)			
CODE 049508120				FACILITY CODE			
				08/13/2020			
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Increase: \$166,471.00 See Schedule							
<b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
	D. OTHER (Specify type of modification and authority)						
<b>E. IMPORTANT:</b> Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
DUNS Number: 049508120							
TOCOR: Michael Nye Max Expire Date: 01/31/2021 Invoice Approver: Michael Nye Alt Invoice App: Edward Hudgens							
The purpose of this modification is to :							
1. Correct an accounting discrepancy resulting from duplicate lines of accounting on the base award. This mod reobligates funding in the amount of \$166,471.00.							
2. Incorporate the attached EPA blanket administrative modification signed by Raoul Scott							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				David Plagge			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				 (Signature of Contracting Officer)		ELECTRONIC SIGNATURE 09/28/2020	

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	68HERD19D0001/68HERC20F0363/P00002	2	7

NAME OF OFFEROR OR CONTRACTOR  
Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>on July 30, 2020.</p> <p>All other terms and conditions remain unchanged.</p> <p>LIST OF CHANGES:</p> <p>Reason for Modification: Funding Only Action</p> <p>Total Amount for this Modification: \$166,471.00</p> <p>New Total Amount for this Version: \$229,941.00</p> <p>New Total Amount for this Award: \$241,471.00</p> <p>Obligated Amount for this Modification:</p> <p>\$166,471.00</p> <p>New Total Obligated Amount for this Award:</p> <p>\$241,471.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 1</p> <p>Total Amount changed</p> <p>from \$63,470.00 to \$229,941.00</p> <p>Obligated Amount for this Modification:</p> <p>\$166,471.00</p> <p>CHANGES FOR DELIVERY LOCATION: ORD RTP</p> <p>Amount changed from \$63,470.00 to \$229,941.00</p> <p>CHANGES FOR ACCOUNTING CODE:</p> <p>20-21-C-26D5000-000FK8XPV-2532-26A5C-2026D5E022-010</p> <p>Amount changed from \$0.00 to \$131,164.26</p> <p>CHANGES FOR ACCOUNTING CODE:</p> <p>20-21-C-26D5000-000FK6XR2-2532-26A5C-2026D5E022-011</p> <p>Amount changed from \$0.00 to \$35,306.74</p> <p>Percent changed from 0 to 55.62745</p> <p>Period of Performance: 08/10/2020 to 01/31/2021</p>				



<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE		PAGE OF PAGES	
2. AMENDMENT/MODIFICATION NUMBER		3. EFFECTIVE DATE 08/13/2020		4. REQUISITION/PURCHASE REQUISITION NUMBER		5. PROJECT NUMBER (If applicable)	
6. ISSUED BY Raoul D. Scott, Director OMS/ARM/OAS/Policy, Training and Oversight Division US Environmental Protection Agency, Mail Code 3802R 1200 Pennsylvania Avenue, NW Washington, DC 20004		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (Number, street, county, State and ZIP Code)  To All EPA Contractors				<input checked="" type="checkbox"/> (X)		9A. AMENDMENT OF SOLICITATION NUMBER	
				<input type="checkbox"/>		9B. DATED (SEE ITEM 11)	
				<input checked="" type="checkbox"/> (X)		10A. MODIFICATION OF CONTRACT/ORDER NUMBER To all EPA Contracts and Orders	
				<input type="checkbox"/>		10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
<b>13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NUMBER AS DESCRIBED IN ITEM 14.</b>							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NUMBER IN ITEM 10A.						
<input type="checkbox"/>							
<input checked="" type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
<input type="checkbox"/>	D. OTHER (Specify type of modification and authority)						
<b>E. IMPORTANT:</b> Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
This contract/order is being modified in accordance with the applicability instructions in interim FAR Case 2019-009, and FAR 4.2105, requiring contracting officers to include FAR clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.  See attached for the full text version of FAR 52.204-25. Contractor Acknowledgment of receipt required.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Raoul D. Scott, Director Policy, Training and Oversight Division			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
				RAOUL SCOTT Digitally signed by RAOUL SCOTT Date: 2020.07.30 11:40:17 -04'00'			
(Signature of person authorized to sign)				(Signature of Contracting Officer)			

Previous edition unusable




<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED 68HERD19D0001/68HERC20F0363/P00003	PAGE	OF
		2	7

NAME OF OFFEROR OR CONTRACTOR

Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Period Of Performance End Date changed from 31-JAN-21 to 30-AUG-21</p> <p>Total Amount for this Modification: \$0.00</p> <p>New Total Amount for this Version: \$241,471.00</p> <p>New Total Amount for this Award: \$241,471.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 1</p> <p>Description changed from PR to establish Sun Valley Health Benefits TO, Westat 68HERD19D0001</p> <p>Documenting health benefits of community revitalization at Sun Valley Colorado to PR to establish Sun Valley Health Benefits TO, Westat 68HERD19D0001</p> <p>Documenting health benefits of community revitalization at Sun Valley Colorado</p> <p>Product/Service code changed from AH91 to AH51</p> <p>CHANGES FOR LINE ITEM NUMBER: 2</p> <p>Description changed from Travel for TO # 13 under Westat 68HERD19D0001: Sun Valley Health Benefits</p> <p>Not to Exceed: \$11,530.00. to Travel for TO # 13 under Westat 68HERD19D0001: Sun Valley Health Benefits</p> <p>Not to Exceed: \$11,530.00.</p> <p>Product/Service code changed from AH91 to AH51</p> <p>CHANGES FOR DELIVERY LOCATION: ORD RTP</p> <p>Delivery Date Added : 08/30/2021</p> <p>Payment:</p> <p>RTP Finance Center</p> <p>US Environmental Protection Agency</p> <p>RTP-Finance Center (AA216-01)</p> <p>109 TW Alexander Drive</p> <p>www2.epa.gov/financial/contracts</p> <p>Durham NC 27711</p> <p>Period of Performance: 08/10/2020 to 08/30/2021</p>				

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE		PAGE OF PAGES	
						1 11	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00004		See Block 16C		PR-ORD-21-02217			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
CAD							
US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x)			
Westat, Inc. Attn: Susan Mountford 1600 RESEARCH BOULEVARD ROCKVILLE MD 208503129							
				9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				x			
				10A. MODIFICATION OF CONTRACT/ORDER NO.			
				68HERD19D0001			
				68HERC20F0363			
				10B. DATED (SEE ITEM 13)			
				08/13/2020			
CODE 049508120		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
See Schedule							
<b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
X	D. OTHER (Specify type of modification and authority) Bilateral - Period of Performance Extension						
<b>E. IMPORTANT:</b> Contractor <input type="checkbox"/> is not <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
DUNS Number: 049508120							
TOCOR: Michael Nye Max Expire Date: 01/31/2021 Invoice Approver: Michael Nye Alt Invoice App: Edward Hudgens							
The purpose of this modification is to change the Period of Performance end date from 08/30/2021 to 02/28/2022. This is due to delays caused by COVID and is a no cost extension. All other terms and conditions remain unchanged.							
LIST OF CHANGES:							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Mark Cranley			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
				 ELECTRONIC SIGNATURE		09/02/2021	
(Signature of person authorized to sign)				(Signature of Contracting Officer)			

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	68HERD19D0001/68HERC20F0363/P00004	2	11

NAME OF OFFEROR OR CONTRACTOR

Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Reason for Modification: Other Administrative Action</p> <p>Period Of Performance End Date changed from 30-AUG-21 to 28-FEB-22</p> <p>CHANGES FOR LINE ITEM NUMBER: 1</p> <p>Description changed from PR to establish Sun Valley Health Benefits TO, Westat 68HERD19D0001 Documenting health benefits of community revitalization at Sun Valley Colorado to PR to establish Sun Valley Health Benefits TO, Westat 68HERD19D0001 Documenting health benefits of community revitalization at Sun Valley Colorado</p> <p>CHANGES FOR DELIVERY LOCATION: ORD RTP</p> <p>Delivery Date Added : 02/28/2022</p> <p>NEW ACCOUNTING CODE ADDED:</p> <p>Account code:</p> <p>Beginning FiscalYear 00</p> <p>Ending Fiscal Year</p> <p>Fund (Appropriation) ZERO</p> <p>Budget Organization DOLLAR</p> <p>Program (PRC) ADMIN</p> <p>Budget (BOC) REQ</p> <p>Job # (Site/Project)</p> <p>Cost Organization</p> <p>DCN-LineID</p> <p>Quantity: 0</p> <p>Amount: \$0.00</p> <p>Percent: 0</p> <p>Subject To Funding: N</p> <p>Payment Address:</p> <p>RTP Finance Center</p> <p>US Environmental Protection Agency</p> <p>RTP-Finance Center (AA216-01)</p> <p>109 TW Alexander Drive</p> <p>www2.epa.gov/financial/contracts</p> <p>Durham NC 27711</p> <p>CHANGES FOR LINE ITEM NUMBER: 2</p> <p>Description changed from Travel for TO # 13 under Westat 68HERD19D0001: Sun Valley Health Benefits Not to Exceed: \$11,530.00. to Travel for TO # 13 under Westat 68HERD19D0001: Sun Valley Health Benefits</p> <p>Not to Exceed: \$11,530.00.</p> <p>Continued ...</p>				

NAME OF OFFEROR OR CONTRACTOR  
Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>CHANGES FOR DELIVERY LOCATION: ORD RTP</p> <p>Delivery Date changed from 08/30/2021 to 02/28/2022</p> <p>Payment:</p> <p> RTP Finance Center  US Environmental Protection Agency  RTP-Finance Center (AA216-01)  109 TW Alexander Drive  www2.epa.gov/financial/contracts  Durham NC 27711 </p> <p>Period of Performance: 08/10/2020 to 02/28/2022</p>				



# ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 03/25/2021		2. CONTRACT NO. (If any) 68HERD19D0001		6. SHIP TO:	
3. ORDER NO. 68HERC21F0129		4. REQUISITION/REFERENCE NO. PR-ORD-21-00140		a. NAME OF CONSIGNEE  Great Lakes Toxicology and Ecology	
5. ISSUING OFFICE (Address correspondence to) CAD  US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001				b. STREET ADDRESS US Environmental Protection Agency 6201 Congdon Blvd.	
				c. CITY Duluth	e. ZIP CODE 55804
7. TO: Susan Mountford				f. SHIP VIA	
a. NAME OF CONTRACTOR Westat, Inc.				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY	
c. STREET ADDRESS 1600 RESEARCH BOULEVARD				REFERENCE YOUR:  Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
d. CITY ROCKVILLE		e. STATE MD	f. ZIP CODE 208503129	Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE CAD	
11. BUSINESS CLASSIFICATION (Check appropriate box(es))					
<input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB					
13. PLACE OF				12. F.O.B. POINT	
a. INSPECTION Destination		b. ACCEPTANCE Destination		14. GOVERNMENT B/L NO.	
				15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	
				16. DISCOUNT TERMS	

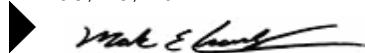
## 17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 049508120 TOCOR: Dale Hoff Invoice Approver: Dale Hoff Alt Invoice App: Edward Hudgens  Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME RTP Finance Center						\$60,120.00
	b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts						\$60,120.00
c. CITY Durham			d. STATE NC	e. ZIP CODE 27711		17(i) GRAND TOTAL	

22. UNITED STATES OF AMERICA BY (Signature)

03/25/2021



ELECTRONIC SIGNATURE

23. NAME (Typed)  
Mark Cranley  
TITLE: CONTRACTING/ORDERING OFFICER

## ORDER FOR SUPPLIES OR SERVICES

PAGE NO

## SCHEDULE - CONTINUATION

2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER	CONTRACT NO.	ORDER NO.
03/25/2021	68HERD19D0001	68HERC21F0129

ITEM NO.	SUPPLIES/SERVICES	QUANTITY ORDERED	UNIT	UNIT PRICE	AMOUNT	QUANTITY ACCEPTED
(a)	(b)	(c)	(d)	(e)	(f)	(g)
0001	Admin Office: CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001 Period of Performance: 03/12/2021 to 07/30/2021  New Task Order# 15 under Contract 68HERD19D0001 ECOTOX Support.  Screening Software additions for literature collected collected for curation of data into the ECOTOX Knowledgebase.  Accounting Info: 20-21-C-26B3000-000FK8-2532-26A6A-2126 B3E001-001 BFY: 20 EFY: 21 Fund: C Budget Org: 26B3000 Program (PRC): 000FK8 Budget (BOC): 2532 Job #: LSMM0000 Cost: 26A6A DCN - Line ID: 2126B3E001-001 Funding Flag: Complete Funded: \$0.00 Accounting Info: 20-21-C-26B3000-000FK8-2532-26A6A-2126 B3E001-002 BFY: 20 EFY: 21 Fund: C Budget Org: 26B3000 Program (PRC): 000FK8 Budget (BOC): 2532 Job #: LSMMSC00 Cost: 26A6A DCN - Line ID: 2126B3E001-002 Funding Flag: Complete Funded: \$210.00 Accounting Info: 20-21-C-26B3000-000FK8-2532-26A6A-2126 B3E001-003 BFY: 20 EFY: 21 Fund: C Budget Org: 26B3000 Program (PRC): 000FK8 Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126B3E001-003 Funding Flag: Complete Funded: \$7,936.00 Accounting Info: 20-21-C-26B3000-000FK8XPV-2532-26A6A-2126B3E001-004 BFY: 20 EFY: 21 Fund: C Budget Org: 26B3000 Program (PRC): 000FK8XPV Budget (BOC): 2532 Cost: Continued ...				60,120.00	
TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))					\$60,120.00	



**ORDER FOR SUPPLIES OR SERVICES**  
**SCHEDULE - CONTINUATION**

PAGE NO  
3

**IMPORTANT:** Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 03/25/2021	CONTRACT NO. 68HERD19D0001	ORDER NO. 68HERC21F0129
-----------------------------	-------------------------------	----------------------------

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	26A6A DCN - Line ID: 2126B3E001-004 Funding Flag: Complete Funded: \$9,750.00 Accounting Info: 20-21-C-26B3000-000FK9XR6-2532-26A6A-2 126B3E001-005 BFY: 20 EFY: 21 Fund: C Budget Org: 26B3000 Program (PRC): 000FK9XR6 Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126B3E001-005 Funding Flag: Complete Funded: \$784.72 Accounting Info: 20-21-C3-26B3000-000FK9-2532-26A6A-212 6B3E001-006 BFY: 20 EFY: 21 Fund: C3 Budget Org: 26B3000 Program (PRC): 000FK9 Budget (BOC): 2532 Job #: HQ00BG00 Cost: 26A6A DCN - Line ID: 2126B3E001-006 Funding Flag: Complete Funded: \$.05 Accounting Info: 20-21-C-26B3000-000FK9-2532-26A6A-2126 B3E001-007 BFY: 20 EFY: 21 Fund: C Budget Org: 26B3000 Program (PRC): 000FK9 Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126B3E001-007 Funding Flag: Complete Funded: \$259.87 Accounting Info: 20-21-C-26B3000-000FK9XR5-2532-26A6A-2 126B3E001-008 BFY: 20 EFY: 21 Fund: C Budget Org: 26B3000 Program (PRC): 000FK9XR5 Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126B3E001-008 Funding Flag: Complete Funded: \$.88 Accounting Info: 20-21-C-26B3000-000FK8-2532-26A6A-2126 B3E001-009 BFY: 20 EFY: 21 Fund: C Budget Org: 26B3000 Program (PRC): 000FK8 Budget (BOC): 2532 Job #: LSMMIH00 Cost: 26A6A DCN - Line ID: 2126B3E001-009 Funding Flag: Complete Funded: \$2,104.00 Accounting Info: Continued ...					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

**ORDER FOR SUPPLIES OR SERVICES**  
**SCHEDULE - CONTINUATION**

PAGE NO  
4

**IMPORTANT:** Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 03/25/2021	CONTRACT NO. 68HERD19D0001	ORDER NO. 68HERC21F0129
-----------------------------	-------------------------------	----------------------------

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	21-22-C-26B3000-000FK8-2532-26A6A-2126 B3E001-010 BFY: 21 EFY: 22 Fund: C Budget Org: 26B3000 Program (PRC): 000FK8 Budget (BOC): 2532 Job #: LSMMSC00 Cost: 26A6A DCN - Line ID: 2126B3E001-010 Funding Flag: Complete Funded: \$391.00 Accounting Info: 21-22-C-26B3000-000FK8-2532-26A6A-2126 B3E001-011 BFY: 21 EFY: 22 Fund: C Budget Org: 26B3000 Program (PRC): 000FK8 Budget (BOC): 2532 Job #: LSMMIH00 Cost: 26A6A DCN - Line ID: 2126B3E001-011 Funding Flag: Complete Funded: \$3,908.00 Accounting Info: 21-22-C-26B3000-000FK9-2532-26A6A-2126 B3E001-012 BFY: 21 EFY: 22 Fund: C Budget Org: 26B3000 Program (PRC): 000FK9 Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126B3E001-012 Funding Flag: Complete Funded: \$34,775.48					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

## **Performance Work Statement**

Contract: 68HERD19D0001

Task Order: 15

**Title: Screening Software additions for Literature collected for curation of data into the ECOTOX Knowledgebase**

**Period of Performance: Date of Issuance to March 31, 2021**

**Task Order Contracting Officer's Representative (TOCOR):**

Dale Hoff

Phone: 218-529-5011

E-mail: [hoff.dale@epa.gov](mailto:hoff.dale@epa.gov)

**Mailing Address for TOCOR:**

USEPA

6201 Congdon Blvd

Duluth, MN 55804

**Address for Courier (e.g., overnight delivery) TOCOR:**

U.S. EPA Human Studies Facility

104 Mason Farm Road

Chapel Hill, NC 27514

**Alternate TOCOR:**

Edward E. Hudgens

Phone: 919-966-0642

E-mail: [hudgens.edward@epa.gov](mailto:hudgens.edward@epa.gov)

**Mailing and Courier Address for Alternate TOCOR:**

US EPA

109 T.W. Alexander Drive

Mail Drop 58C

Research Triangle Park, NC 27711

### **A. Background and Purpose**

The EPA/ORD Great Lakes Toxicology and Ecology Division (GLTED) is responsible for administering and curating ecological toxicity data in the ECOTOX Knowledgebase (<https://cfpub.epa.gov/ecotox/index.cfm>). The ECOTOXicology knowledgebase (ECOTOX) is a source for locating single chemical toxicity data for aquatic life, terrestrial plants and wildlife. ECOTOX is a unique system which includes toxicity data derived predominately from the peer-reviewed literature for aquatic life, terrestrial plants, and terrestrial wildlife. Curation of the ecotoxicity data occurs in 5 broad steps: 1.) development of search terms for each chemical; 2.) Conducting literature searches; 3.) skimming and/or screening digital files of titles, abstracts, and

keywords to discriminate potentially references; 4.) obtaining full text versions of potentially relevant publications and further screen those for inclusion/exclusion into the data curation process; 5.) coding/curating data from the included references into the database. This process is currently a mix of computational assisted software applications and manual curation.

During the Westat task order 005, their subcontractor Sciome developed models within their software application Swift-Active Screener to assist ECOTOX reviewers in predicting exclusionary reasons for references at the title/abstract (TIAB) level of review. These models were developed using a base set of ~ 100,000 abstracts that had been manually reviewed and classified as excluded for various reasons (human health, chemical methods, non-English, etc). The results were first-generation versions of the exclusion reason models demonstrating good performance, but there is room for additional improvement. Some of the categories were trained with limited data (e.g. field studies). Other categories may benefit from class-specific models. For example, the “Non-English” class may benefit from models built specifically to detect language of the text; the “Chemical Methods” class may benefit from inclusion of a chemical name recognition module; other classes may benefit by integration of modules designed specifically to detect species, health effects, etc. We also know that in the training datasets provided, in many cases, the provided exclusion reasons are incomplete since the original reviewers most likely provided only the first exclusion reason encountered. This is not ideal either for building or evaluating the models and could be remedied by targeted re-annotation of a portion of the training data.

EPA now seeks to pursue refinements to the initial models developed to predict exclusionary reasons to assist in further streamlining our curation protocols.

## **B. General Requirements**

In providing support under the tasks described in Section C, the contractor also shall adhere to the following general requirements:

### **Databases and Computer programs**

The contractor shall ensure that the updated databases, computer programs and the corresponding documentation developed under this contract are accessible to the EPA. The contractor shall use software packages that are relevant to particular statistical analysis, generally acceptable by experts as being reliable for the statistical analysis and allow for any necessary data modification. The program shall identify the origin of the input data sets (e.g., version X supplied by EPA on specific date).

### **Deliverables**

The contractor shall provide documentation in computer files, and in hardcopy, upon specific request. When appropriate (e.g., in a report rather than data listing), the contractor shall clearly specify the methods, procedures, considerations, assumptions, relevant citations, data sources, and data that support the results and any recommendations. The contractor also shall document

alternative methods, procedures, and assumptions that the contractor considered during the performance of this TO. Further, the documentation shall be labeled with the name of the contractor and the EPA contract number.

The contractor shall ensure that documentation is created using, or easily converted to, Agency standard software formats (e.g., Microsoft Office) to facilitate EPA use and review. Contractor shall also provide all programming code used to develop specialized software.

### **Identification at Meetings**

At meetings with EPA, the contractor shall state that he/she represents a contractor working for EPA, and wear clear identification identifying his contractor affiliation. Further, the contractor shall prepare briefing materials that clearly indicate that they have been provided by a contractor working for EPA.

### **Work plan**

The contractor shall prepare a work plan for this Task Order, due 10 days from receipt of this Task Order. To the greatest extent possible, the Contractor shall make use of any previously developed procedures, processes and materials that will be provided by the EPA.

### **Quality Assurance Project Plan (QAPP)**

#### QA Project Plan Requirements

EPA policy requires that an *approved* Quality Assurance Project Plan (QAPP) be in place before any work begins that involves the collection, generation, evaluation, analysis or use of environmental data. The QAPP shall follow applicable project specific requirements outlined in EPA Requirements for QA Project Plans (QA/R-5, EPA 2001; [https://www.epa.gov/sites/production/files/2016-06/documents/r5-final\\_0.pdf](https://www.epa.gov/sites/production/files/2016-06/documents/r5-final_0.pdf)). Work under this task order shall comply with existing QAPP 0030193-QP-1-ECOTOX-Hoff-2019 entitled “**Automated Screening Software for Literature collected for curation of data into the ECOTOX Knowledgebase**”. This QAPP is an addendum to the larger ECOTOX Knowledgebase QAPP (I-GLTED-0030193).

If **major** changes, as determined by the TOCOR, are needed to an approved QAPP, the contractor shall submit a revised QAPP to EPA, and no data collection activity shall take place until the revised QAPP is approved. When preparing this revised version, the contractor shall ensure that it is written in an active voice and shall include a version history page that summarizes changes made. The contractor also shall provide EPA with copies of any modified SOPs or checklists. EPA will review the revised QAPP and provide the contractor with written approval or comments within 15 days of receiving the contractor’s submission.

If **minor** changes, as determined by the TOCOR, are needed to an approved QAPP, the contractor shall submit a revised QAPP to the EPA TOCOR. Data collection activity shall continue regardless of the formal approval. This revised QAPP shall include a version history

page that summarizes the changes made. The contractor also shall provide EPA with copies of any modified SOPs or checklists. EPA will review the revised QAPP and provide the contractor with written approval or comments within 15 days of receiving the contractor's submission.

#### Additional QA Documentation Required

In addition to the QAPP requirements described above, all major deliverables (e.g., Technical Support Documents, Study Reports, Study Plans, etc.) produced by the contractor under this work assignment must include a discussion of the QA/QC activities that were or will be performed to support the deliverable. For example, a Technical Support Document or Study Report must include a clear discussion of the quality management strategies that were employed to control and document the quality of data generated and used.

The contractor also shall provide EPA with monthly progress reports, due the 15<sup>th</sup> of every month, which includes QA activities performed during implementation of this Task Order. These monthly reports shall identify QA activities performed to support implementation of this task order, problems encountered, deviations from the QAPP, and corrective actions taken. If desired, the contractor may include this as a part of the contract-required monthly financial/technical progress report.

#### **Travel**

No travel is anticipated.

#### **Other Requirements**

The contractor shall provide written notification to the Contracting Officer, Contract Level Contracting Officer's Representative, and Task Order Contracting Officer's Representative when 75 percent of the hours and/or funds have been spent on this Task Order.

#### **C. Technical Support**

Specific work under this task order includes the following:

- 1.) The contractor shall meet with EPA to review all ECOTOX Knowledgebase's TIAB screening level exclusionary criteria to ensure they are optimally identified and subsequently tweak as appropriate.
- 2.) The contractor shall identify classes of exclusionary criteria in the initial versions of the models with low coverage. EPA will provide further examples of abstracts excluded in those categories using manual processes.
- 3.) The contractor shall provide class-specific features and data augmentation to improve performance (e.g. integration of chemical term recognition, language detection, etc).
- 4.) The contractor shall develop active learning capabilities of exclusionary reasons within Swift-Active screener.
- 5.) The contractor shall improve term highlighting and exclusion reason explanations.

The Contractor shall maintain liaison with the TOCOR and/or their identified technical contact through conference calls, at an agreed upon interval, regarding the status of the activities within this Task. The Contractor shall prepare Agendas for the conference calls, distribute the Action Items and distribute Action Item updates during weeks without conference calls. Copies of all deliverables shall be sent to the TOCOR, the COR and the CO (as necessary).

#### **D. Deliverables and Project Schedule**

Task No.	Deliverable Description	Deliverable Date
0	Work Plan	10 days from receipt of Task Order
0	Revised QAPP, if necessary	With Work Plan
0	Monthly Progress Reports with QA	With monthly progress reports due the 15 <sup>th</sup> of the month
1	The contractor shall meet with EPA to review all ECOTOX Knowledgebase's TIAB screening level exclusionary criteria to ensure they are optimally identified and subsequently tweak as appropriate.	No more than 10 working days from Cost and Work Plan Approval
2	The contractor shall identify classes of exclusionary criteria in the initial versions of the models with low coverage. EPA will provide further examples of abstracts excluded in those categories using manual processes.	No more than 30 working days from Cost and Work Plan Approval
3	The contractor shall provide class-specific features and data augmentation to improve performance (e.g. integration of chemical term recognition, language detection, etc).	No more than 75 working days from Cost and Work Plan Approval
4	The contractor shall develop active learning capabilities of exclusionary reasons within Swift-Active screener.	No more than 100 working days from Cost and Work Plan Approval
5	The contractor shall improve term highlighting and exclusion reason explanations.	No more than 100 working days from Cost and Work Plan Approval

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE		PAGE OF PAGES 1 4	
2. AMENDMENT/MODIFICATION NO. P00001		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.	
5. PROJECT NO. (If applicable)		6. ISSUED BY CAD		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Westat, Inc. Attn: Susan Mountford 1600 RESEARCH BOULEVARD ROCKVILLE MD 208503129		(x)		9A. AMENDMENT OF SOLICITATION NO.	
CODE 049508120		FACILITY CODE		9B. DATED (SEE ITEM 11)	
		x		10A. MODIFICATION OF CONTRACT/ORDER NO. 68HERD19D0001 68HERC21F0129	
				10B. DATED (SEE ITEM 13) 03/25/2021	

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)  
See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) Bilateral - Mutual Agreement of the Parties


**E. IMPORTANT:** Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)  
DUNS Number: 049508120  
TOCOR: Dale Hoff Invoice Approver: Dale Hoff Alt Invoice App: Edward Hudgens

The purpose of this modification is to update the PWS to reflect the deliverable dates included in the Westat Proposal dated February 18, 2021. Please see the attached updated PWS titled "122 68HERC21F0129 Mod P00001 PWS for new ECOTOX Knowledgebase task order 04.06.21" with the updated deliverable dates.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Mark Cranley	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 04/08/2021

Previous edition unusable



NAME OF OFFEROR OR CONTRACTOR  
Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 Period of Performance: 03/12/2021 to 07/30/2021				

## **Performance Work Statement**

Contract: 68HERD19D0001

Task Order: 15

**Title: Screening Software additions for Literature collected for curation of data into the ECOTOX Knowledgebase**

**Period of Performance: Date of Issuance to March 31, 2021**

**Task Order Contracting Officer's Representative (TOCOR):**

Dale Hoff

Phone: 218-529-5011

E-mail: [hoff.dale@epa.gov](mailto:hoff.dale@epa.gov)

**Mailing Address for TOCOR:**

USEPA

6201 Congdon Blvd

Duluth, MN 55804

**Address for Courier (e.g., overnight delivery) TOCOR:**

U.S. EPA Human Studies Facility

104 Mason Farm Road

Chapel Hill, NC 27514

**Alternate TOCOR:**

Edward E. Hudgens

Phone: 919-966-0642

E-mail: [hudgens.edward@epa.gov](mailto:hudgens.edward@epa.gov)

**Mailing and Courier Address for Alternate TOCOR:**

US EPA

109 T.W. Alexander Drive

Mail Drop 58C

Research Triangle Park, NC 27711

### **A. Background and Purpose**

The EPA/ORD Great Lakes Toxicology and Ecology Division (GLTED) is responsible for administering and curating ecological toxicity data in the ECOTOX Knowledgebase (<https://cfpub.epa.gov/ecotox/index.cfm>). The ECOTOXicology knowledgebase (ECOTOX) is a source for locating single chemical toxicity data for aquatic life, terrestrial plants and wildlife. ECOTOX is a unique system which includes toxicity data derived predominately from the peer-reviewed literature for aquatic life, terrestrial plants, and terrestrial wildlife. Curation of the ecotoxicity data occurs in 5 broad steps: 1.) development of search terms for each chemical; 2.) Conducting literature searches; 3.) skimming and/or screening digital files of titles, abstracts, and

keywords to discriminate potentially references; 4.) obtaining full text versions of potentially relevant publications and further screen those for inclusion/exclusion into the data curation process; 5.) coding/curating data from the included references into the database. This process is currently a mix of computational assisted software applications and manual curation.

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EPA now seeks to pursue refinements to the initial models developed to predict exclusionary reasons to assist in further streamlining our curation protocols.

## **B. General Requirements**

In providing support under the tasks described in Section C, the contractor also shall adhere to the following general requirements:

### **Databases and Computer programs**

The contractor shall ensure that the updated databases, computer programs and the corresponding documentation developed under this contract are accessible to the EPA. The contractor shall use software packages that are relevant to particular statistical analysis, generally acceptable by experts as being reliable for the statistical analysis and allow for any necessary data modification. The program shall identify the origin of the input data sets (e.g., version X supplied by EPA on specific date).

### **Deliverables**

The contractor shall provide documentation in computer files, and in hardcopy, upon specific request. When appropriate (e.g., in a report rather than data listing), the contractor shall clearly specify the methods, procedures, considerations, assumptions, relevant citations, data sources, and data that support the results and any recommendations. The contractor also shall document

alternative methods, procedures, and assumptions that the contractor considered during the performance of this TO. Further, the documentation shall be labeled with the name of the contractor and the EPA contract number.

The contractor shall ensure that documentation is created using, or easily converted to, Agency standard software formats (e.g., Microsoft Office) to facilitate EPA use and review. Contractor shall also provide all programming code used to develop specialized software.

### **Identification at Meetings**

At meetings with EPA, the contractor shall state that he/she represents a contractor working for EPA, and wear clear identification identifying his contractor affiliation. Further, the contractor shall prepare briefing materials that clearly indicate that they have been provided by a contractor working for EPA.

### **Work plan**

The contractor shall prepare a work plan for this Task Order, due 10 days from receipt of this Task Order. To the greatest extent possible, the Contractor shall make use of any previously developed procedures, processes and materials that will be provided by the EPA.

### **Quality Assurance Project Plan (QAPP)**

#### QA Project Plan Requirements

EPA policy requires that an *approved* Quality Assurance Project Plan (QAPP) be in place before any work begins that involves the collection, generation, evaluation, analysis or use of environmental data. The QAPP shall follow applicable project specific requirements outlined in EPA Requirements for QA Project Plans (QA/R-5, EPA 2001; [https://www.epa.gov/sites/production/files/2016-06/documents/r5-final\\_0.pdf](https://www.epa.gov/sites/production/files/2016-06/documents/r5-final_0.pdf)). Work under this task order shall comply with existing QAPP 0030193-QP-1-ECOTOX-Hoff-2019 entitled “**Automated Screening Software for Literature collected for curation of data into the ECOTOX Knowledgebase**”. This QAPP is an addendum to the larger ECOTOX Knowledgebase QAPP (I-GLTED-0030193).

If **major** changes, as determined by the TOCOR, are needed to an approved QAPP, the contractor shall submit a revised QAPP to EPA, and no data collection activity shall take place until the revised QAPP is approved. When preparing this revised version, the contractor shall ensure that it is written in an active voice and shall include a version history page that summarizes changes made. The contractor also shall provide EPA with copies of any modified SOPs or checklists. EPA will review the revised QAPP and provide the contractor with written approval or comments within 15 days of receiving the contractor’s submission.

If **minor** changes, as determined by the TOCOR, are needed to an approved QAPP, the contractor shall submit a revised QAPP to the EPA TOCOR. Data collection activity shall continue regardless of the formal approval. This revised QAPP shall include a version history

page that summarizes the changes made. The contractor also shall provide EPA with copies of any modified SOPs or checklists. EPA will review the revised QAPP and provide the contractor with written approval or comments within 15 days of receiving the contractor's submission.

#### Additional QA Documentation Required

In addition to the QAPP requirements described above, all major deliverables (e.g., Technical Support Documents, Study Reports, Study Plans, etc.) produced by the contractor under this work assignment must include a discussion of the QA/QC activities that were or will be performed to support the deliverable. For example, a Technical Support Document or Study Report must include a clear discussion of the quality management strategies that were employed to control and document the quality of data generated and used.

The contractor also shall provide EPA with monthly progress reports, due the 15<sup>th</sup> of every month, which includes QA activities performed during implementation of this Task Order. These monthly reports shall identify QA activities performed to support implementation of this task order, problems encountered, deviations from the QAPP, and corrective actions taken. If desired, the contractor may include this as a part of the contract-required monthly financial/technical progress report.

#### **Travel**

No travel is anticipated.

#### **Other Requirements**

The contractor shall provide written notification to the Contracting Officer, Contract Level Contracting Officer's Representative, and Task Order Contracting Officer's Representative when 75 percent of the hours and/or funds have been spent on this Task Order.

#### **C. Technical Support**

Specific work under this task order includes the following:

- 1.) The contractor shall meet with EPA to review all ECOTOX Knowledgebase's TIAB screening level exclusionary criteria to ensure they are optimally identified and subsequently tweak as appropriate.
- 2.) The contractor shall identify classes of exclusionary criteria in the initial versions of the models with low coverage. EPA will provide further examples of abstracts excluded in those categories using manual processes.
- 3.) The contractor shall provide class-specific features and data augmentation to improve performance (e.g. integration of chemical term recognition, language detection, etc).
- 4.) The contractor shall develop active learning capabilities of exclusionary reasons within Swift-Active screener.
- 5.) The contractor shall improve term highlighting and exclusion reason explanations.

The Contractor shall maintain liaison with the TOCOR and/or their identified technical contact through conference calls, at an agreed upon interval, regarding the status of the activities within this Task. The Contractor shall prepare Agendas for the conference calls, distribute the Action Items and distribute Action Item updates during weeks without conference calls. Copies of all deliverables shall be sent to the TOCOR, the COR and the CO (as necessary).

#### **D. Deliverables and Project Schedule**

Task No.	Deliverable Description	Deliverable Date
0	Work Plan	10 days from receipt of Task Order
0	Revised QAPP, if necessary	No more than 20 working days from TO Award
0	Monthly Progress Reports with QA	With monthly progress reports due the 20 <sup>th</sup> of the month
1	The contractor shall meet with EPA to review all ECOTOX Knowledgebase's TIAB screening level exclusionary criteria to ensure they are optimally identified and subsequently tweak as appropriate.	No more than 10 working days from TO Award
2	The contractor shall identify classes of exclusionary criteria in the initial versions of the models with low coverage. EPA will provide further examples of abstracts excluded in those categories using manual processes.	No more than 30 working days from TO Award
3	The contractor shall provide class-specific features and data augmentation to improve performance (e.g. integration of chemical term recognition, language detection, etc).	No more than 100 working days from TO Award
4	The contractor shall develop active learning capabilities of exclusionary reasons within Swift-Active screener.	No more than 100 working days from TO Award
5	The contractor shall improve term highlighting and exclusion reason explanations.	No more than 100 working days from TO Award

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE		PAGE OF PAGES 1 4	
2. AMENDMENT/MODIFICATION NO. P00002		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.	
5. PROJECT NO. (If applicable)		6. ISSUED BY CAD		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Westat, Inc. Attn: Susan Mountford 1600 RESEARCH BOULEVARD ROCKVILLE MD 208503129		(x)		9A. AMENDMENT OF SOLICITATION NO.	
9B. DATED (SEE ITEM 11)		x		10A. MODIFICATION OF CONTRACT/ORDER NO. 68HERD19D0001 68HERC21F0129	
10B. DATED (SEE ITEM 13) 03/25/2021		CODE 049508120		FACILITY CODE	

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)  
See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) Bilateral - Mutual Agreement of the Parties


**E. IMPORTANT:** Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)  
DUNS Number: 049508120  
TOCOR: Dale Hoff Invoice Approver: Dale Hoff Alt Invoice App: Edward Hudgens

The purpose of this modification is to correct the Period of Performance End Date to 09/30/22. This is a no cost modification. All other terms and conditions remain unchanged.

LIST OF CHANGES:  
Reason for Modification: Other Administrative Action  
Period Of Performance End Date changed from 30-JUL-21 to 30-SEP-22  
Total Amount for this Modification: \$0.00  
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Mark Cranley	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 03/08/2022

Previous edition unusable

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	68HERD19D0001/68HERC21F0129/P00002	2	4

NAME OF OFFEROR OR CONTRACTOR

Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>New Total Amount for this Version: \$60,120.00</p> <p>New Total Amount for this Award: \$60,120.00</p> <p>Onsite Contract changed to : N</p> <p>BIB - Infrastructure Bill Funds changed to : N/A</p> <p>CHANGES FOR LINE ITEM NUMBER: 1</p> <p>Description changed from New Task Order# 15 under Contract 68HERD19D0001 ECOTOX Support.</p> <p>Screening Software additions for literature collected for curation of data into the ECOTOX Knowledgebase. to New Task Order# 15 under Contract 68HERD19D0001 ECOTOX Support.</p> <p>Screening Software additions for literature collected for curation of data into the ECOTOX Knowledgebase.</p> <p>Payment:</p> <p>RTP Finance Center</p> <p>US Environmental Protection Agency</p> <p>RTP-Finance Center (AA216-01)</p> <p>109 TW Alexander Drive</p> <p><a href="http://www2.epa.gov/financial/contracts">www2.epa.gov/financial/contracts</a></p> <p>Durham NC 27711</p> <p>Period of Performance: 03/12/2021 to 09/30/2022</p>				



# ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

3

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 03/30/2021		2. CONTRACT NO. (If any) 68HERD19D0001		6. SHIP TO: a. NAME OF CONSIGNEE Office of Research and Development	
3. ORDER NO. 68HERC21F0157		4. REQUISITION/REFERENCE NO. PR-ORD-21-00472			
5. ISSUING OFFICE (Address correspondence to) CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001				b. STREET ADDRESS US Environmental Protection Agency 109 T.W. Alexander Drive	
				c. CITY Research Triangle Park	e. ZIP CODE 27711
7. TO: Susan Mountford				f. SHIP VIA	
a. NAME OF CONTRACTOR Westat, Inc.				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY REFERENCE YOUR: _____ Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
c. STREET ADDRESS 1600 RESEARCH BOULEVARD				Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
d. CITY ROCKVILLE		e. STATE MD	f. ZIP CODE 208503129		
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE	

11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) <input type="checkbox"/> h. EDWOSB VETERAN-OWNED ELIGIBLE UNDER THE WOSB PROGRAM				12. F.O.B. POINT	
13. PLACE OF a. INSPECTION Destination		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	
b. ACCEPTANCE Destination				16. DISCOUNT TERMS	

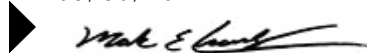
## 17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 049508120 TOCOR: Elizabeth Sams InvoiceApprover: Elizabeth Sams Alt Invoice App: David Lehmann  Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME RTP Finance Center						\$34,774.00
	b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts						\$34,774.00
c. CITY Durham				d. STATE NC	e. ZIP CODE 27711		17(i) GRAND TOTAL

22. UNITED STATES OF AMERICA BY (Signature)

03/30/2021



ELECTRONIC SIGNATURE

23. NAME (Typed)  
Mark Cranley  
TITLE: CONTRACTING/ORDERING OFFICER

PAGE NO

DATE OF ORDER		CONTRACT NO.		ORDER NO.		
03/30/2021		68HERD19D0001		68HERC21F0157		
ITEM NO.	SUPPLIES/SERVICES	QUANTITY ORDERED	UNIT	UNIT PRICE	AMOUNT	QUANTITY ACCEPTED
(a)	(b)	(c)	(d)	(e)	(f)	(g)
0001	<p>Admin Office:</p> <p>CAD</p> <p>US Environmental Protection Agency</p> <p>26 West Martin Luther King Drive</p> <p>Mail Code: W136</p> <p>Cincinnati OH 45268-0001</p> <p>Accounting Info:</p> <p>21-22-C-26D2000-000FK6XR2-2585-26A5C-2126D2C004-001</p> <p>BFY: 21 EFY: 22 Fund: C Budget Org: 26D2000 Program (PRC): 000FK6XR2 Budget (BOC): 2585 Cost: 26A5C DCN - Line ID: 2126D2C004-001</p> <p>Period of Performance: 03/29/2021 to 09/30/2021</p> <p>Task Order #16 under 68HERD19D0001</p> <p>34,774.00</p> <p>External Letter Peer Review Report</p> <p>"Comparative Assessment of the Impacts of Prescribed Fire Versus Wildfire (CAIF): A Case Study in the Western U.S."</p>					

\$34,774.00

**PERFORMANCE WORK STATEMENT  
TO #16 under 68HERD19D0001  
TASK ORDER # TBD**

**I. ADMINISTRATION**

a) **Title:** External Letter Peer Review of Report “Comparative Assessment of the Impacts of Prescribed Fire Versus Wildfire (CAIF): A Case Study in the Western U.S.”

b) **Period of Performance:** Task Order award through May 31, 2021

c) **Task Order CO’s Representative (TOCOR):**  
**Elizabeth Sams**  
Program Analyst  
U.S. Environmental Protection Agency  
109 T.W. Alexander Drive  
Research Triangle Park, NC 27711  
MC E205-09  
(919) 541-3417

**Alternate Task Order CO’s Representative (TOCOR):**  
**David Lehmann**  
Toxicologist  
U.S. Environmental Protection Agency  
109 T.W. Alexander Drive  
Research Triangle Park, NC 27711  
MD: B243-01  
(919) 541-0234

d) **Background:**

Some ecosystems need fire to thrive, however, wildland fires and the resulting smoke can impact public health by degrading air and water quality in areas near and far from the fire. Prescribed fire is a land management tool that can both strengthen ecosystems by increasing habitat diversity, and reduce the buildup of unwanted fuels, thus reducing the likelihood of catastrophic wildfires. Wildfires can be orders of magnitude larger in scale than prescribed fires and detrimentally impact ecosystems and public health, due to both direct fire damage and smoke exposure. Advanced knowledge of the time and place of prescribed fire can provide adequate time to inform communities of the potential public health impact of smoke exposure and subsequently prepare their most vulnerable individuals to take action to avoid smoke exposure. While prescribed fires and wildfires both produce smoke, we currently lack the ability to quantitatively differentiate the impacts attributed to different fire management regimes. Specifically, we lack the ability to relate specific exposure patterns of different smoke constituents (e.g., PM<sub>2.5</sub> and ozone) to health impacts, how this information may influence public responses; and quantitative methods to differentiate between wildfire and prescribed-burn health impacts. To address this issue, in January 2020, the Wildland Fire Leadership Council (WFLC), which is comprised of Federal, state, tribal, county, and municipal government officials, asked EPA to lead an effort in collaboration with USFS and DOI to conduct an assessment titled: *Comparative Assessment of the Impacts of Prescribed Fire Versus Wildfire (CAIF): A Case Study in the Western U.S.* Because of the potential use of

the information within the CAIF Report by a range of stakeholders to inform decisions regarding prescribed fire and other land management activities the report was designated Influential Scientific Information (ISI).

The report will contain about 150 pages of text covering topics that allow for an assessment of the tradeoffs between different fire management regimes and wildfire. Specifically, the report will include discussions of forest conditions and fire management, air quality monitoring as it pertains to wildfires, health and ecological effects of wildfire smoke along with actions individuals can take to reduce wildfire smoke exposure, and the direct and indirect damages associated with fire, along with quantitative analyses that rely on air quality modeling to estimate the potential health impacts and economic implications of changes in air quality associated with wildfire smoke. There are approximately 30 pages of appendices/supplemental material which provide either background information on some of the modeling components used in the quantitative analyses, or more additional information on some of the studies referenced within the main body of the report. This report is classified as Influential Scientific Information (ISI).

## II. OBJECTIVE

The objective of this task order is to provide balanced professional services sufficient for the independent expert peer review of the report “Comparative Assessment of the Impacts of Prescribed Fire Versus Wildfire (CAIF): A Case Study in the Western U.S.”. The review shall require the independent participation and independent reports of seven (7) expert reviewers, each to provide an individual response to the attached Charge Questions.

All work to be done under this Task Order shall be in compliance with the EPA *Science and Technology Policy Council Peer Review Handbook* (Fourth Edition, EPA/100/B-15/001, 2015), available online at: <http://www.epa.gov/osa/peer-review-handbook-4th-edition-2015>

## III. SCOPE OF WORK

The contractor shall perform the following tasks to perform the reviews to the accomplishment of the objective:

### Task 1. Establish Communication

Within two (2) working days of award, the Contractor shall convene a conference call (not to exceed 1 hour) with the Task Order Contract Officer Representative (TOCOR) and appropriate EPA and Contractor staff to clarify outstanding questions and confirm the schedule and specific tasks for the Task Order. The Contractor shall provide the TOCOR with weekly email progress reports and initiate additional communication with the TOCOR should developments arise that will affect the conduct or schedule of this Task Order. Within three (3) working days of award, the contractor shall deliver a written schedule for the completion of activities within this Performance Work Statement (PWS).

<b>Deliverable 1A:</b> Conference Call	<b>Due:</b> 2 working days after award of TO
<b>Deliverable 1B:</b> Schedule of activities	<b>Due:</b> 3 working days after award of TO

<b>Deliverable 1C:</b> Email updates	<b>Due:</b> Weekly, including if developments arise that will affect the conduct or schedule of this TO
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## **TASK 2: Identify and Select External Experts with Appropriate Expertise and Determine Absence of Conflicts of Interest**

The contractor shall independently select and secure arrangements with seven (7) experts who have demonstrated knowledge and experience required for this review. Although area of expertise (see Appendix A) may refer to academic disciplines, that should not be construed as meaning that experts must hold academic appointments; reviewers with documented expertise may be drawn from other research institutions, consulting companies, non-profits, etc., as long as they meet the requirements and have no conflicts of interest. Reviewers can include both state and Federal employees, but they cannot be within the Agencies of the authors of this report (i.e., EPA, USFS, DOI, and NIST). In addition, potential conflicts of interest may arise by including reviewers from General Dynamics Information Technology (GDIT) or Wood Environment & Infrastructure Solutions, Inc. Lastly, while there is a conflict of interest with Susan Prichard from the University of Washington due to her being a co-author of this report, there are no known conflicts of interest with other individuals at the University of Washington.

The contractor shall have ten (10) working days after the initial conference call with the TOCOR to identify and review CVs for a pool of ten (10) candidate reviewers. The contractor shall ensure that the list of identified peer reviewers/experts conforms to the technical selection criteria as described in Appendix A. The contractor shall screen all candidate reviewers for Conflict of Interest (COI) and appearance of bias issues, as identified in the *EPA Science and Technology Policy Council Peer Review Handbook* (Fourth Edition, EPA/100/B-15/001, 2015).

The contractor shall provide a written summary (e.g., biosketch) of each candidate reviewer with their affiliation and qualifications, as well as a curriculum vitae. The contractor shall provide a written statement attesting to no conflict of interest or appearance of bias issues, or describe potential conflicts of interest (as described by the candidate reviewer). In addition to the desired distribution of disciplines, a balanced candidate list will include individuals from various organizations.

After receiving the list of ten (10) candidate reviewers, the TOCOR may provide comments about achieving the necessary balance among the reviewers, whether the circumstances or disclosure provided by any candidate reviewer evidences any interest which would impeach his impartiality, or if there is any inconsistency or deficiency that would adversely impact the qualifications of a nominated reviewer. EPA will provide any comments to the contractor with two (2) working days of receipt of the list of candidate reviewers. Within one (1) working day of receiving any feedback from EPA, the contractor shall select seven (7) reviewers. Selection of reviewers shall be entirely the responsibility of the contractor. For final selectees, the contractor shall provide written certification that there is no Conflict of Interest and provide documentation to the TOCOR.

<b>Deliverable 2A:</b> List of 10 candidate reviewers screened for conflicts of interest	<b>Due:</b> Within 10 working days after the initial conference call with TOCOR
--	---

<b>Deliverable 2B:</b> Select and contact 7 reviewers	<b>Due:</b> 1 working days after TOCOR provides comments to contractor
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### **TASK 3: Initiate Letter Peer Review**

EPA shall provide an electronic version of the report to the contractor as a Microsoft Word or Adobe PDF file.

The contractor shall commence with initiating the letter peer review within two (2) working days of the latter of: the contractor selecting peer reviewers, or the contractor receiving the Draft Report, including appendices outlining specific details of the modeling component of the report as well as study specific details, from EPA. The contractor shall provide the following review materials to the reviewers:

- Reviewer charge and instructions
- Report

The contractor shall develop the overall charge and instructions for the reviewers, including the Charge Questions provided by EPA (see Appendix B). These charge questions may have minor modifications by EPA but shall be finalized by the initial conference call with EPA and the contractor. The written reviewers' comments shall be due to the contractor within ten (10) working days of receipt of these materials. Each reviewer is not expected to critically evaluate every section of the charge documents. Each reviewer is expected to focus their efforts on their area of expertise.

<b>Deliverable 3A:</b> Develop charge and instructions for reviewers and provide all materials to reviewers	<b>Due:</b> Within 2 working days after selecting reviewers
<b>Deliverable 3B:</b> Receive written comments from reviewers	<b>Due:</b> 10 working days after TOCOR provides peer review materials to reviewers

### **TASK 4: Deliver Letter Reviews**

The contractor shall prepare and deliver a draft final report within five (5) working days of peer reviewers having completed their review. EPA shall have no more than five (5) working days to review the draft final report and for the TOCOR to ask the contractor to go back to any reviewers for clarification or additional detail as needed. The contractor shall provide a final report to the TOCOR no later than two (2) working days after any requests from the TOCOR to clarify anything in the final report.

The contractor shall review all responses to ensure that the reviewers have fulfilled their responsibilities under their agreement with the contractor. The final report (Peer Review Report) prepared by the contractor shall follow the guidelines in the Peer Review Handbook, and include the following sections:

- Introduction, background, and description of the process to arrive at the final report
- Written confirmation that there are no COIs from reviewers
- Summary of all responses by charge question, including where there are conflicting opinions
- Charge that was given to reviewers

- CVs for all reviewers
- Individual responses as submitted

The final report shall be provided to the TOCOR in a 508-compliant electronic format in Microsoft Word 2003 or later.

<b>Deliverable 4A:</b> Draft final report	<b>Due:</b> 5 working days after peer reviewers have completed their review.
<b>Deliverable 4B:</b> Final report	<b>Due:</b> 2 working days after receiving any requests for clarification from the TOCOR

#### **TASK 5: Manage and Monitor the Review Process**

The contractor shall manage and monitor the review process with conformance to deliverable due dates in accordance with this PWS. The Contractor shall maintain liaison with the reviewers throughout the process.

## Appendix A: Expertise Matrix

Evidence of Expertise: Candidate panelist/reviewers may hold positions in academic, non-profit, consulting, or government institutions, as long as they can demonstrate the following expertise. The candidate panelist/reviewers shall have scientific credentials equivalent to a Ph.D. and shall be regarded as experts in their respective fields. Expertise shall be judged by authorship on original publications and/or reviews in scientific journals in the areas of expertise identified below. Candidate panelist/reviewers may also be judged by other measures of expertise including professional accomplishments and membership in professional societies.

Area of Expertise for Review	Academic Disciplines/Roles that Reflect Area of Expertise
(1) Wildfires and/or Prescribed Fires	<ul style="list-style-type: none"><li>- Broad expertise and understanding of the issues surrounding wildfires and/or prescribed fires</li></ul>
(2) Forest Ecology/Ecological Impacts of Fire	<ul style="list-style-type: none"><li>- Forest conditions and the impact of fire on forest health</li><li>- Ecological impacts of wildfire smoke</li></ul>
(3) Modeling Fuel, Emissions, and Air Quality	<ul style="list-style-type: none"><li>- Air quality models (e.g., BlueSky Pipeline, CMAQ, VELMA) used to estimate wildfire smoke impacts</li></ul>
(4) Air Pollution/Wildfire Smoke Epidemiology and Exposure	<ul style="list-style-type: none"><li>- Characterization of the health effects of wildfire smoke exposure</li><li>- Expertise in identifying strengths/limitations in epidemiology studies based of exposure methods used</li><li>- Expertise in population exposure to particulate matter</li><li>- Analyses aimed at examining potential implications of actions/interventions to reduce/mitigate wildfire smoke exposure</li></ul>
(5) Air Quality/Wildfire Smoke Monitoring	<ul style="list-style-type: none"><li>- Expertise in the monitoring of ambient air pollution and wildfire smoke</li></ul>
(6) Fire/Smoke Damages	<ul style="list-style-type: none"><li>- Understanding of the economic implications of fire</li><li>- Expertise in firefighter health</li></ul>
(7) Quantitative assessment of health/economic impacts of air pollution	<ul style="list-style-type: none"><li>- Expertise in U.S. EPA's Environmental Benefits Mapping and Analysis Program – Community Edition (BenMAP – CE)</li><li>- Multiple publications examining health impacts of changes in air quality</li></ul>



## Appendix B: Charge Questions

In responding to the charge questions please delineate between those comments that identify critical deficiencies within the report, and therefore should be addressed prior to finalization, and those comments that identify issues that could be addressed in future analyses.

### Overarching Charge Question:

1. Please comment on the overall organization and clarity of the report. Please identify its overall strengths and weaknesses.

### Chapter Specific Charge Questions:

*If a question is beyond your technical expertise, please skip it.*

1. Chapter 1 introduces this assessment including the rationale, approach, and goals of the report, along with the appropriate context in which to view the results. Please comment on the completeness of the introductory information. Are there any areas that are unclear, or would benefit from additional information to set the basis of the assessment? Please explain
2. The structure of this assessment is described in the form of a conceptual framework in Chapter 2. The chapter is intended to set the stage for the remaining chapters and demonstrate how the individual components of the assessment fit together to inform the key questions regarding the air quality, health, and ecological impacts of different fire management regimes. Please comment on whether the conceptual framework fully captures the components of different fire management regimes and the corresponding health impacts and damages. Are there specific components that should be added or removed from the framework? How well does the text support the overall framework? Please explain.
3. Chapter 3 outlines baseline forest conditions, defines different fire management regimes, and discusses the role of fire in ecosystems, specifically focusing on the ecosystem of the case study fire locations (i.e., Ponderosa Pine Ecosystems). Please comment on the completeness of this discussion and whether it forms an adequate introduction of the topics.
4. Current air quality monitoring capabilities, as they pertain to wildfire smoke, are a key resource for understanding the specific health effects associated with smoke exposures and are critical to evaluate the performance of air quality models in predicting air quality impacts from wildfires. Chapter 4 discusses current air quality monitoring capabilities for wildfire smoke and associated challenges. Are all relevant capabilities discussed, or is there anything that should be added? Are the strengths and weaknesses of the individual capabilities covered in sufficient detail? Does the presentation of information on monitoring capabilities help to characterize the confidence in the air quality and health and ecological impacts provided in the assessment? Please explain.
5. The main component of this assessment is an air quality modeling exercise that allows for a comparison of the health impacts between different fire management regimes. Chapter 5 outlines the modeling approach employed and the various assumptions and decisions made in

the process of modeling both hypothetical fire management regimes as well as prescribed fire. Please comment on the overall modeling approach, specifically the characterization of fuel loads, emissions, and the application of the air quality models, and whether there are inherent limitations that have not been adequately captured within the chapter. Is the chapter clearly written in cohesive way to describe the exercise?

6. Chapter 6 encompasses two components of this report: (1) a discussion of the health effects attributed to wildfire smoke and potential actions that can be taken to reduce exposures to wildfire smoke; and (2) a discussion of the ecological effects of wildfire smoke. Please comment on the following:
  - a. The health effects discussion focuses on U.S.-based epidemiologic studies to support the BenMAP – CE analysis discussed in Chapter 7. Please comment on whether the discussion on the health effects evidence, including the corresponding appendix table, adequately inform decisions on the studies that could be used to estimate health impacts in BenMAP – CE. Have any U.S.-based studies been excluded from the discussion that should be included?
  - b. The discussion of actions that can be taken to reduce wildfire smoke exposure is aimed at supporting the development of sensitivity analyses in BenMAP – CE to estimate the potential reduction in PM<sub>2.5</sub> exposure from wildfire smoke that could be experienced due to specific actions by the public. Please comment on the adequacy of this discussion, the exposure reduction options characterized, and the overall conclusions of the section.
  - c. The ecological impacts discussion focuses on those effects attributed to wildfire smoke exposure and deposition. Please comment on the ecological impacts highlighted and whether additional studies/citations should be considered within this section.
7. In fully characterizing the tradeoffs between prescribed fires and wildfires it is necessary to also characterize the non-smoke related damages associated with fire, including impact on fire fighter health and safety, as well as some additional direct and indirect damages attributed to wildfire smoke. Please comment on the adequacy of these discussions. Are there additional citations or information needed to strengthen this summary? Are there other damages that should be included in this Chapter?
8. Chapter 8 conducts a BenMAP – CE analysis building off the information presented in the air quality modeling chapter (Chapter 5) and the health effects and exposure reduction sections of Chapter 6. Please comment on 1) the approach used to compare results between the different fire management regimes 2) the exposure reduction scenarios examined, and 3) the presentation of results.
9. Chapter 9 consists of an integrated synthesis of the information presented within this report. Please comment on how well this chapter fully captures the breadth of this report. Are the various factors to consider in examining tradeoffs between the different fire management regimes adequately described? Does it appropriately highlight the strengths and limitations of the assessment? Please explain.

# ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

3

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 08/25/2021		2. CONTRACT NO. (If any) 68HERD19D0001		6. SHIP TO: a. NAME OF CONSIGNEE Human Services Facility-Chapel Hill	
3. ORDER NO. 68HERC21F0362		4. REQUISITION/REFERENCE NO. PR-ORD-21-01287			
5. ISSUING OFFICE (Address correspondence to) CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001				b. STREET ADDRESS US Environmental Protection Agency 104 Mason Farm Road	
				c. CITY Chapel Hill	e. ZIP CODE 27514
7. TO: Susan Mountford				f. SHIP VIA	
a. NAME OF CONTRACTOR Westat, Inc.				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY REFERENCE YOUR: _____ Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
c. STREET ADDRESS 1600 RESEARCH BOULEVARD				Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
d. CITY ROCKVILLE		e. STATE MD	f. ZIP CODE 208503129		
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE	

11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB				12. F.O.B. POINT	
13. PLACE OF a. INSPECTION Destination		b. ACCEPTANCE Destination		14. GOVERNMENT B/L NO.	
				15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 12/31/2021	
16. DISCOUNT TERMS					

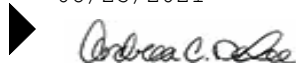
## 17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 049508120 Westat proposal dated 07/26/2021 estimated a total of 400 hours and a cost of \$64,630.00 to complete the ordered work, inclusive of all options. CLIN structure provides the cost/price structure with a Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME RTP Finance Center						\$64,630.00
	b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts						\$56,232.00
c. CITY Durham				d. STATE NC	e. ZIP CODE 27711		17(i) GRAND TOTAL

22. UNITED STATES OF AMERICA BY (Signature)

08/25/2021



ELECTRONIC SIGNATURE

23. NAME (Typed)  
Andrea C. Dehne  
TITLE: CONTRACTING/ORDERING OFFICER

## ORDER FOR SUPPLIES OR SERVICES

PAGE NO

## SCHEDULE - CONTINUATION

2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER		CONTRACT NO.			ORDER NO.	
08/25/2021		68HERD19D0001			68HERC21F0362	
ITEM NO.	SUPPLIES/SERVICES	QUANTITY ORDERED	UNIT	UNIT PRICE	AMOUNT	QUANTITY ACCEPTED
(a)	(b)	(c)	(d)	(e)	(f)	(g)
0001	<p>breakout table included in the proposal. Line Item 0001 is fully funded. The Optional Task (Line Item 0002) will be funded when/if exercised. TOCOR: Edward Hudgens Max Expire Date: 12/31/2021 Invoice Approver: Edward Hudgens Alt Invoice App: Amanda Boone Admin Office: CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001 Period of Performance: 08/25/2021 to 12/31/2021</p> <p>Tasks 1-2: Monthly Progress Reports with QA and Report not to exceed 5 pages</p> <p>Accounting Info: 20-21-C-26D5000-000FK6XR2-2532-26A6A-2 126D5E028-001 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000FK6XR2 Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126D5E028-001 Funding Flag: Complete Funded: \$709.00</p> <p>Accounting Info: 20-21-C-26D5000-000FK8XPW-2532-26A6A-2 126D5E028-002 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000FK8XPW Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126D5E028-002 Funding Flag: Complete Funded: \$55,523.00</p> <p>Accounting Info: 21-22-C-26D5000-000FK8XPW-2532-26A6A-2 126D5E028-003 BFY: 21 EFY: 22 Fund: C Budget Org: 26D5000 Program (PRC): 000FK8XPW Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126D5E028-003 Funding Flag: Complete Funded: \$0.00</p>				56,232.00	
0002	<p>Optional Task 3: Obtain Data Sets (Option Line Item) Continued ...</p>				8,398.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$64,630.00

ORDER FOR SUPPLIES OR SERVICES  
SCHEDULE - CONTINUATION

PAGE NO  
3

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER	CONTRACT NO.	ORDER NO.
08/25/2021	68HERD19D0001	68HERC21F0362

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	12/31/2021  Delivery - Invoice Payment Schedule shall not exceed a frequency greater than once a month and 90% of the task order price. Acceptance for invoicing is based on deliverable approval by the TOCOR. For efficient processing IAW FAR clause 52.232-32, performance based payment invoicing amounts will not be submitted until the TOCOR provides deliverable approval. The TOCOR will notify Westat within 14 days of submission of a deliverable of EPAs intention to approve or disapprove.  TOCOR and Invoice Approver: Edward E. Hudgens/Phone: 919-966-0642/E-mail: hudgens.edward@epa.gov ALT TOCOR and Invoice Approver: Amanda W. Boone/Phone: 202-564-7614/E-mail: boone.amanda@epa.gov					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

## **Performance Work Statement**

Contract: 68HERD19D0001

Task Order: TBA

**Title: Human Activity Data Availability**

**Period of Performance: Date of Issuance to December 31, 2021**

**Task Order Contracting Officer's Representative (TOCOR):**

Edward E. Hudgens

Phone: 919-966-0642

E-mail: [hudgens.edward@epa.gov](mailto:hudgens.edward@epa.gov)

**Mailing Address:**

US EPA

109 T.W. Alexander Drive

Mail Drop 58C

Research Triangle Park, NC 27711

**Address for Courier (e.g., overnight delivery):**

U.S. EPA Human Studies Facility

104 Mason Farm Road

Chapel Hill, NC 27514

**Alternate TOCOR:**

Amanda W. Boone

Phone: (202) 564-7614

E-mail: [boone.amanda@epa.gov](mailto:boone.amanda@epa.gov)

**Mailing Address and Address for Courier:**

US EPA

1300 Pennsylvania Avenue NW (8602R)

Washington, DC 20460

### **A. Background and Purpose**

The Contractor shall support the EPA's Sustainable and Healthy Community (SHC) research efforts by determining the availability of human activity data of individuals in areas that have undergone remediation / restoration / revitalization actions. The Contractor shall not consider any COVID-19 databases or databases available from other Federal Government agencies (such as the CDC or the NCHS). The Contractor shall consider the factors listed below as the EPA attempts to amass sufficient, detailed data at a reasonable cost to answer questions about the human health impacts of remediation / restoration / revitalization activities at the community level.

## **B. General Requirements**

In providing support under the tasks described in Section C, the Contractor also shall adhere to the following general requirements:

### **Databases and Computer programs**

The Contractor shall ensure that the updated databases, computer programs and the corresponding documentation developed under this contract are accessible to the EPA. The Contractor shall use software packages that are relevant to particular statistical analyses, generally acceptable by experts as being reliable for the statistical analysis and allow for any necessary data modification. The program shall identify the origin of the input data sets (e.g., version X supplied by EPA on specific date).

### **Deliverables**

The Contractor shall provide documentation in computer files, and in hardcopy, upon specific request. When appropriate (e.g., in a report rather than data listing), the Contractor shall clearly specify the methods, procedures, considerations, assumptions, relevant citations, data sources, and data that support the results and any recommendations. The Contractor shall document alternative methods, procedures, and assumptions that the contractor considered during the performance of this TO. Further, the Contractor shall label the documentation with the name of the Contractor and the EPA contract number. (For example, a memorandum explaining the results of in-home sampling shall be placed on company letterhead).

The Contractor shall ensure that documentation is created using, or easily converted to, Agency standard software formats (e.g., Microsoft Office) to facilitate EPA use and review.

### **Identification at Meetings**

At meetings with EPA, the Contractor shall state that he/she represents a Contractor working for EPA, and wear clear identification identifying Contractor affiliation. The Contractor shall prepare briefing materials clearly indicating they have been provided by a Contractor working for EPA.

### **Quality Assurance Project Plan (QAPP)**

EPA policy requires that an approved Quality Assurance Project Plan (QAPP) be in place before any work begins that involves the collection, generation, evaluation, analysis or use of environmental data. Since this search for existing data sets project does not require any of these actions, no formal QAPP shall be required. The Contractor shall document any activities that they perform to ensure the quality of the search process as part of their Monthly Reports and summarize these activities in their last Deliverable.

The Contractor shall provide EPA with monthly progress reports which include QA activities performed during implementation of this Task Order. These monthly reports shall identify QA

activities performed to support implementation of this Task Order, problems encountered and corrective actions taken. The Contractor may include this as a part of the contract-required monthly financial/technical progress report.

### **Travel**

This Task Order should not require any travel. If any non-local travel directly chargeable to this TO is required, the Contractor shall submit a request to and receive approval from the Contract Level Contracting Officer's Representative prior to the travel.

### **Other Requirements**

The Contractor shall provide written notification to the Contracting Officer (CO), Contract Level Contracting Officer's Representative, and Task Order Contracting Officer's Representative when 75 percent of the hours and/or funds have been spent on this Task Order.

### **C. Technical Support**

The Contractor shall compile a list of available data sources, data source descriptions, data source contents, points of contact, and costs for health and physical-activity related data within the states of Minnesota, Wisconsin, Illinois, Indiana, Ohio, Pennsylvania, and New York. Data sources may cover beyond these areas but should include data from at least one of these states. Examples of physical activity data are strava, fitbit, or other app data, and activity surveys. Examples of health-related data are electronic health records and health registry data (such as state birth registries). Initially, data from the Oswego River Area of Concern (AOC) is preferred. The Oswego River/Harbor Area of Concern is located on the southeastern shore of Lake Ontario and is centered in the city of Oswego, New York. The AOC includes the harbor area and the lower segment of the Oswego River up to the Varick power dam. The Contractor shall identify what time periods are covered by the data sources and temporal resolution of the data. Only data from 2000 to 2020 shall be considered. The Contractor shall identify spatial resolution of the data within the sources, such as individual, census tract, county, etc.

The Contractor shall identify and give preference to those data sources that are free or low cost (under \$10,000 per year of data). The EPA may require the Contractor to obtain these data sets that are free of charge. Data sets that include less than 1000 people per year shall not be included for the EPA's consideration. All data sets must be readable by common statistical software, no data sets that are only available in .pdf format shall be considered.

The EPA acknowledges that these search parameters are broad. The EPA expects the process to select data sets will be an iterative process with the Contractor providing information on a few data sets, then the EPA reviewing the information and refining the inclusion / exclusion criteria. The Contractor shall not expend more than 400 labor hours on this Task Order.

The Contractor shall provide a short, written report (not to exceed 5 pages) of the methods used to identify data sources. This report shall include an abbreviated timeline of the actions undertaken to find the data set. For example, if certain search terms or applications were used, dates when refined search terms were submitted, the results of the search with each set of refined criteria.



The Contractor shall maintain liaison with the TOCOR through conference calls, at times that are appropriate based upon the amount of work being performed, regarding the status of the activities within this Task. The Contractor shall prepare Agendas for the conference calls, distribute the Action Items and distribute Action Item updates during weeks without conference calls, if there are any outstanding Action Items. Copies of all deliverables shall be sent to the TOCOR, the Contract Level TOCOR and the CO (as necessary).

**D. Deliverables and Project Schedule**

Task No.	Deliverable Description	Deliverable Date
1	Monthly Progress Reports with QA	With monthly progress reports, concurrent with Invoice submission
2	A report, not to exceed 5 pages that details the activities of this Task Order	Prior to the end of the Period of Performance (December 31, 2021).
Option 1	The Contractor shall obtain data sets that are free of charge. An approved QAPP shall be in place before data collection can begin.	Prior to the end of the Period of Performance (December 31, 2021).

## ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

5

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 09/22/2021		2. CONTRACT NO. (If any) 68HERD19D0001		6. SHIP TO: a. NAME OF CONSIGNEE Human Services Facility-Chapel Hill	
3. ORDER NO. 68HERC21F0430		4. REQUISITION/REFERENCE NO. See Schedule			
5. ISSUING OFFICE (Address correspondence to) CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001				b. STREET ADDRESS US Environmental Protection Agency 104 Mason Farm Road	
				c. CITY Chapel Hill	e. ZIP CODE 27514
7. TO: Susan Mountford				f. SHIP VIA	
a. NAME OF CONTRACTOR Westat, Inc.				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY REFERENCE YOUR: _____ Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
c. STREET ADDRESS 1600 RESEARCH BOULEVARD				Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
d. CITY ROCKVILLE		e. STATE MD	f. ZIP CODE 208503129		
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE	

11. BUSINESS CLASSIFICATION (Check appropriate box(es))				12. F.O.B. POINT	
<input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB					
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 09/15/2022	
a. INSPECTION Destination	b. ACCEPTANCE Destination			16. DISCOUNT TERMS	

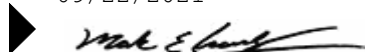
## 17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 049508120 TOCOR: Edward Hudgens Invoice Approver: Edward Hudgens Alt Invoice App: Amanda Boone  Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME RTP Finance Center						\$45,541.00
	b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts						\$288,097.00
c. CITY Durham			d. STATE NC	e. ZIP CODE 27711		17(i) GRAND TOTAL	

22. UNITED STATES OF AMERICA BY (Signature)

09/22/2021


ELECTRONIC  
SIGNATURE

23. NAME (Typed)

Mark Cranley

TITLE: CONTRACTING/ORDERING OFFICER

## ORDER FOR SUPPLIES OR SERVICES

PAGE NO

## SCHEDULE - CONTINUATION

2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER	CONTRACT NO.	ORDER NO.
09/22/2021	68HERD19D0001	68HERC21F0430

ITEM NO.	SUPPLIES/SERVICES	QUANTITY ORDERED	UNIT	UNIT PRICE	AMOUNT	QUANTITY ACCEPTED
(a)	(b)	(c)	(d)	(e)	(f)	(g)
0001	<p>Admin Office:  CAD  US Environmental Protection Agency  26 West Martin Luther King Drive  Mail Code: W136  Cincinnati OH 45268-0001  Period of Performance: 09/20/2021 to 09/19/2022</p> <p>Base Period under Task Order titled "Eastern Alabama Cyanotoxin Health Study"</p> <p>Task 0: Revised QAPP, Monthly Progress Reports with QA  Task 1: Staffing recommendations, Draft Study Manual, List of Necessary Supplies  Task 2: Draft Revisions to SOP's  Task 3: Site visit to Auburn, Alabama  Task 4a: Conduct 30 sampling events  Task 4b: Perform sample processing, shipping, analysis, and QA of data from sampling events  Task 5: Draft report not exceeding 3 pages with sample collection activities details  Incrementally Funded Amount: \$245,148.21  Product/Service Code: AH51  Requisition No: PR-ORD-21-00854, PR-ORD-21-01291</p> <p>Accounting Info:  20-21-C-26D5000-000FK8XPV-2532-26A6A-2  126D5E022-001 BFY: 20 EFY: 21 Fund: C  Budget Org: 26D5000 Program (PRC):  000FK8XPV Budget (BOC): 2532 Cost:  26A6A DCN - Line ID: 2126D5E022-001  Funding Flag: Partial  Funded: \$76,637.00</p> <p>Accounting Info:  20-21-C-26D5000-000FK7XR3-2532-26A6A-2  126D5E022-002 BFY: 20 EFY: 21 Fund: C  Budget Org: 26D5000 Program (PRC):  000FK7XR3 Budget (BOC): 2532 Cost:  26A6A DCN - Line ID: 2126D5E022-002  Funding Flag: Partial  Funded: \$89,579.00</p> <p>Accounting Info:  Continued ...</p>					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

**ORDER FOR SUPPLIES OR SERVICES**  
**SCHEDULE - CONTINUATION**

PAGE NO  
3

**IMPORTANT:** Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 09/22/2021	CONTRACT NO. 68HERD19D0001	ORDER NO. 68HERC21F0430
-----------------------------	-------------------------------	----------------------------

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	20-21-C-26D5000-000FK7XR4-2532-26A6A-2 126D5E022-003 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000FK7XR4 Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126D5E022-003 Funding Flag: Partial Funded: \$14,059.43 Accounting Info: 20-21-C-26D5000-000FK8XPV-2532-26A5C-2 126D5E027-001 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000FK8XPV Budget (BOC): 2532 Cost: 26A5C DCN - Line ID: 2126D5E027-001 Funding Flag: Partial Funded: \$30.99 Accounting Info: 20-21-C-26D5000-000FK8XPV-2532-26A6A-2 126D5E027-002 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000FK8XPV Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126D5E027-002 Funding Flag: Partial Funded: \$7,001.24 Accounting Info: 20-21-C-26D5000-000FK8XPW-2532-26A6A-2 126D5E027-003 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000FK8XPW Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126D5E027-003 Funding Flag: Partial Funded: \$840.30 Accounting Info: 20-21-C-26D5000-000FK6XR2-2532-26A5C-2 126D5E027-004 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000FK6XR2 Budget (BOC): 2532 Cost: 26A5C DCN - Line ID: 2126D5E027-004 Funding Flag: Partial Funded: \$32.68 Accounting Info: 20-21-C-26D5000-000FK6XR2-2532-26A6A-2 126D5E027-005 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000FK6XR2 Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126D5E027-005 Funding Flag: Partial Continued ...					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

**ORDER FOR SUPPLIES OR SERVICES**  
**SCHEDULE - CONTINUATION**

PAGE NO  
4

**IMPORTANT:** Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 09/22/2021	CONTRACT NO. 68HERD19D0001	ORDER NO. 68HERC21F0430
-----------------------------	-------------------------------	----------------------------

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	Funded: \$24,967.57 Accounting Info: 20-21-C-26D5000-000FK7XR4-2532-26A6A-2 126D5E027-006 BFY: 20 EFY: 21 Fund: C Budget Org: 26D5000 Program (PRC): 000FK7XR4 Budget (BOC): 2532 Cost: 26A6A DCN - Line ID: 2126D5E027-006 Funding Flag: Partial Funded: \$32,000.00					
0002	OPT QTY Task 1a: One additional day sampling at 3 ponds (Option Line Item) 03/15/2022 Product/Service Code: AH51				4,048.00	
0003	OPT QTY Task 1b: Additional day sampling processing, shipping, and analysis at 3 ponds (Option Line Item) 03/15/2022 Product/Service Code: AH51				11,546.00	
0004	OPT QTY Task 2a: Additional day sampling at 3 ponds (Option Line Item) 03/15/2022 Product/Service Code: AH51				4,048.00	
0005	OPT QTY Task 2b: Additional day sample processing, shipping, and analysis at 3 ponds (Option Line Item) 03/15/2022 Product/Service Code: AH51				11,546.00	
0006	OPT QTY Task 6: Results from all sample analyses, final Study Manual, Final Report not to exceed 3 pages with details of sample collection activities incorporating EPA comments (Option Line Item) Continued ...				14,353.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$45,541.00

ORDER FOR SUPPLIES OR SERVICES  
SCHEDULE - CONTINUATION

PAGE NO  
5

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER  
09/22/2021

CONTRACT NO.  
68HERD19D0001

ORDER NO.  
68HERC21F0430

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	03/15/2022 Product/Service Code: AH51  Delivery - Invoice Payment Schedule shall not exceed a frequency greater than once a month and 90% of the task order price. Acceptance for invoicing is based on deliverable approval by the TOCOR. For efficient processing IAW FAR clause 52.232-32, performance based payment invoicing amounts will not be submitted until the TOCOR provides deliverable approval. The TOCOR will notify Westat within 14 days of submission of a deliverable of EPAs intention to approve or disapprove.  TOCOR and Invoice Approver: Edward E. Hudgens/Phone: 919-966-0642/E-mail: hudgens.edward@epa.gov Alt TOCOR and Invoice Approver: Amanda W. Boone/Phone: 202-564-7614/E-mail: boone.amanda@epa.gov					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

**Performance Work Statement**

Contract: Westat 68HERD19D0001

Task Order: 11

**Title: Eastern Alabama Cyanotoxin Health Study**

**Period of Performance: Date of Issuance to One year from date of issuance**

**Task Order Contracting Officer's Representative (TOCOR):**

Edward E. Hudgens

Phone: (919) 966-0642

E-mail: [hudgens.edward@epa.gov](mailto:hudgens.edward@epa.gov)

**Mailing Address:**

US EPA

109 T.W. Alexander Drive

Mail Drop 58C

Research Triangle Park, NC 27711

**Address for Courier (e.g., overnight delivery):**

U.S. EPA Human Studies Facility

104 Mason Farm Road

Chapel Hill, NC 27514

**Alternate TOCOR:**

Amanda W. Boone

Phone: (202) 564-7614

E-mail: [boone.amanda@epa.gov](mailto:boone.amanda@epa.gov)

**Mailing Address and Address for Courier:**

US EPA

1300 Pennsylvania Avenue NW (8602R)

Washington, DC 20460

**A. Background and Purpose**

As part of Contract EP-D-12-050, the Contractor developed several procedures and protocols to sample air and water from a site with a known algal bloom potentially containing endotoxins and cyanotoxin compounds. The objective of this study is to determine if these toxins could be inhaled by nearby people. The previous study occurred at a public beach, but this study will be performed at sites that are part of the University of Auburn property. No human observational data will be collected during this study.

## **B. General Requirements**

In providing support under the tasks described in Section C, the Contractor shall adhere to the following general requirements:

### **Databases and Computer programs**

The Contractor shall ensure that the updated databases, computer programs and the corresponding documentation developed under this contract are accessible to the EPA. The Contractor shall use software packages that are relevant to particular statistical analysis, generally acceptable by experts as being reliable for the statistical analysis and allow for any necessary data modification. The program shall identify the origin of the input data sets (e.g., version X supplied by EPA on specific date).

### **Deliverables**

Upon request, the Contractor shall provide documentation in computer files, and in hardcopy. When appropriate (e.g., in a report rather than data listing), the Contractor shall clearly specify the methods, procedures, considerations, assumptions, relevant citations, data sources, and data that support the results and any recommendations. The Contractor shall document alternative methods, procedures, and assumptions that the Contractor considered during the performance of this TO. The Contractor shall label documentation with the name of the Contractor and the EPA contract number. (For example, a memorandum explaining the results of air sampling shall be placed on company letterhead).

The Contractor shall ensure that documentation is created using, or easily converted to, Agency standard software formats (e.g., Microsoft Office) to facilitate EPA use and review.

### **Identification at Meetings**

At meetings with EPA, the Contractor shall state that he/she represents a Contractor working for EPA, and wear clear identification identifying his Contractor affiliation. Further, the Contractor shall prepare briefing materials that clearly indicate that they have been provided by a Contractor working for EPA.

### **Quality Assurance Project Plan (QAPP)**

#### **QA Project Plan Requirements**

EPA policy requires that an *approved* Quality Assurance Project Plan (QAPP) be in place before any work begins that involves the collection, generation, evaluation, analysis or use of environmental data. The QAPP shall follow applicable project specific requirements outlined in EPA Requirements for QA Project Plans (QA/R-5, EPA 2001; [https://www.epa.gov/sites/production/files/2016-06/documents/r5-final\\_0.pdf](https://www.epa.gov/sites/production/files/2016-06/documents/r5-final_0.pdf)) and (QA/G-5, <https://www.epa.gov/quality/guidance-quality-assurance-project-plans-epa-qag-5>). The EPA has already provided a copy of the Clear Lake intramural research Quality Assurance Project Plan document and a copy of the Auburn, Alabama intramural research Quality Assurance Project



Plan document. The Contractor shall initially use the Quality Assurance Project Plan that they developed for the Clearlake, CA and revise this document as necessary.

If **major** changes, as determined by the TOCOR, are needed to an approved QAPP, the Contractor shall submit a revised QAPP to EPA, and no data collection activity shall take place until the revised QAPP is approved. Major changes are any changes other than typographical errors, or editorial revisions i.e. adding/removing team members or change in timeline. When preparing this revised version, the Contractor shall ensure that it is written in an active voice and shall include a version history page that summarizes changes made. The Contractor also shall provide EPA with copies of any modified SOPs or checklists. EPA will review the revised QAPP and provide the Contractor with written approval or comments within 15 calendar days of receiving the Contractor's submission.

If **minor** changes, as determined by the TOCOR, are needed to an approved QAPP, the Contractor shall submit a revised QAPP to the EPA TOCOR. Data collection activity shall continue regardless of the formal approval. This revised QAPP shall include a version history page that summarizes the changes made. The Contractor also shall provide EPA with copies of any modified SOPs or checklists. EPA will review the revised QAPP and provide the Contractor with written approval or comments within 15 days of receiving the contractor's submission.

#### Data Quality Act/Information Quality Guidelines Requirements

The Data Quality Act (also known as the Information Quality Act) requires EPA to ensure that influential information disseminated by the Agency is sufficiently transparent in terms of data and methods of analysis that the information is capable of being substantially reproduced. To support compliance with these data transparency/data reproducibility requirements, EPA plans to include QAPPs as part of any rulemaking record documentation to be made available to the public. The Contractor may claim information in QAPPs as confidential; if the Contractor chooses to do so, the Contractor shall submit a sanitized (i.e., public) version and an un-sanitized (i.e., confidential) version at the time the QAPP is submitted for approval by EPA. The sanitized version will be included in the public docket for the applicable rulemaking (or other docket or record), and the un-sanitized version will be included in a non-public (i.e., confidential) portion of the docket (or record).

Information contained in the approved QAPP shall be transparent and reproducible and meet the requirements of the Data Quality Act for influential information. EPA's *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity, of Information Disseminated by the Environmental Protection Agency* (EPA/260R-02-008, October 2002, [https://www.epa.gov/sites/production/files/2020-02/documents/epa-info-quality-guidelines\\_pdf\\_version.pdf](https://www.epa.gov/sites/production/files/2020-02/documents/epa-info-quality-guidelines_pdf_version.pdf)), referred to as "EPA's Information Quality Guidelines," describe EPA procedures for meeting Data Quality Act requirements. Section 6.3 of EPA's Information Quality Guidelines indicate that "especially rigorous robustness checks" should be applied in circumstances where quality-related information cannot be disclosed due to confidentiality issues. Where applicable, the Contractor should indicate which results were obtained using the tools (SOPs, checklists, and guidelines) that the Contractor designates as confidential so that the

EPA TOCOR can easily identify the areas that will require rigorous robustness checks and document that those checks have been performed.

#### Additional QA Documentation Required

In addition to the QAPP requirements described above, all major deliverables (e.g., Technical Support Documents, Study Reports, Study Plans, etc.) produced by the Contractor under this Task Order shall include a discussion of the QA/QC activities that were or will be performed to support the deliverable. For example, a Technical Support Document or Study Report shall include a clear discussion of the quality management strategies that were employed to control and document the quality of data generated and used.

The Contractor also shall provide EPA with monthly progress reports which includes QA activities performed during implementation of this Task Order. These monthly reports shall identify QA activities performed to support implementation of this task order, problems encountered, deviations from the QAPP, and corrective actions taken. If desired, the Contractor may include this as a part of the contract-required monthly financial/technical progress report.

#### **Travel**

This Task Order will require travel to Auburn, Alabama to conduct the field work on the grounds of Auburn University that is described in this PWS. The Contractor may be required to perform a site visit to this location to set up the logistics for the field sampling event. The Contractor shall submit a request to and receive approval from the Contract Level Contracting Officer's Representative prior to any travel.

#### **Other Requirements**

The Contractor shall provide written notification to the Contracting Officer, Contract Level Contracting Officer's Representative, and Task Order Contracting Officer's Representative when 75 percent of the hours and/or funds have been spent on this Task Order.

#### **C. Technical Support**

The Contractor shall assist the EPA as we develop plans, protocols, and other items for a field study in Auburn, Alabama. The Contractor shall purchase supplies, purchase or rent equipment, revise previously developed sample collection protocols and revise previously developed the sample tracking forms. The EPA anticipates that only minor edits will be needed to the Clear Lake, CA Study documentation and that the EPA will provide any new protocols. The Contractor shall be responsible for all sample analyses. The Contractor shall recommend appropriate staffing for this project, a draft Study Manual and a list of necessary supplies based on a late July study start date. After approval, the Contractor shall make the necessary arrangements and purchase / rent the necessary supplies for this Study.

The Contractor shall conduct 30 sampling events at 3 sampling sites (10 each site) at research ponds on the University of Auburn's property. One site will be a control pond with minimal contamination, the other two will be known, contaminated sites. The EPA may require that a third contaminated pond be sampled 10 times (Option 1). These sites will probably vary in

concentration of cyanotoxic algae over time due to weather conditions and U. of Auburn research activities. The Contractor shall determine the most effective way to do these sampling events based upon cost, and other factors such as, but not limited to, Saturday FedEx costs and availability, and analysis lab Saturday availability. The EPA anticipates the need for the Contractor to make a site visit to Auburn, Alabama as part of the Study planning (Deliverable 3). As noted in the Deliverables list, the Contractor shall include estimates for 28 Optional sampling events (non-site specific). Each of these Options shall include all of the same elements as to be identical to the “Base” sampling events.

The Contractor shall collect water samples two times per day during each sampling event, at each study site, based upon scientific need. The Contractor shall analyze Water samples. The list of analytes and information to be collected is, but is not limited to:

Nutrients:

- Total suspended solids
- Organic suspended solids
- Inorganic suspended solids
- Total Phosphorus
- Soluble Reactive Phosphorus
- Total Nitrogen
- Nitrate
- Nitrite
- Total Ammonia Nitrogen
- Total Hardness Mg mg/L
- Total Hardness Ca mg/L
- Total Iron mg/L
- Alkalinity in CaCO<sub>3</sub> mval/L

Temperature

Turbidity

Conductivity

pH

DO

Endotoxin

Chlorophyll-a, phycocyanin

Phytoplankton (including cyanobacteria) (sample shipped to EPA's Gulf Breeze Facility)

Cyanobacteria toxins

Microbial community assessment (sample shipped to Argonne National Laboratory (ANL) sequencing facility)

The Contractor shall collect the following Weather data two times a day:

Air temperature

Humidity

Rainfall (daily)

Wind direction

Wind speed

The Contractor shall collect the following Air samples:

Air endotoxin (daily)

Air cyanobacteria toxin (daily)

These air samples shall be collected for approximately 8 hours.

The EPA anticipates limiting this list based upon scientific need and cost. The Contractor shall provide information and the availability of labs that can provide analysis information for multiple items as part of a single analysis "panel". The EPA anticipates storing all suitable samples for later analysis, which will not be part of this Task Order. The EPA will develop sampling protocols and procedures for any items that differ from the items collected during the Clear Lake, CA study.

The Contractor shall report the results of sample analyses and information collected at the sampling sites to the EPA before the end of the Period of Performance for this Task Order.

The Contractor shall conform to the previously approved QAPP for the Clear Lake, California Cyanotoxin work until the Contractor has produced the staffing plan and draft Study Manual documents. The Contractor shall ensure that these documents can serve as the Task Order QAPP and that the documents meet the EPA Requirements for Quality Assurance Project Plans (QA/R-5) and the approved Quality Management Plan for this Contract.

The Contractor shall retain any new or modified materials for submission to the EPA at the completion of the Task Order. This includes copies of all statistical programs, statistical code and/or logs of output. The EPA may require the Contractor to provide the programming code

used for specific data analysis or quality assurance tasks prior to the end of the Task Order for EPA review and QA activities.

The Contractor shall maintain liaison with the TOCOR through conference calls, as necessary, based upon Task Order activity, regarding the status of the activities within this Task. The Contractor shall prepare Agendas for the conference calls, distribute the Action Items and distribute Action Item updates during weeks without conference calls. Copies of all deliverables shall be sent to the TOCOR, the Contract Level TOCOR and the CO (as necessary).

#### **D. Deliverables and Project Schedule**

Task No.	Deliverable Description	Deliverable Date
0	Revised QAPP, if necessary	10 business days from Task Order issuance
0	Monthly Progress Reports with QA	With monthly progress reports
1	Staffing recommendations, draft Study Manual and a list of necessary supplies	No more than 10 working days from Task Order issuance
2	Draft revisions to the study Standard Operating Procedures (SOP's), if necessary	Before any field work begins
3	Site visit to Auburn, Alabama	Before any field work begins
4a	Conduct 30 sampling events, 10 at each of 3 ponds	Before September 30, 2021
4b	All sample processing, shipping, analysis and QA of data from the 30 sampling events (3 ponds)	Before March 31, 2022
Option 1a	One additional day sampling at 3 ponds	Before September 30, 2021
Option 1b	Additional day sample processing, shipping, analysis at 3 ponds	Before March 31, 2022
Option 2a	One additional day sampling at 3 ponds	Before September 30, 2021
Option 2b	Additional day sample processing, shipping, analysis at 3 ponds	Before March 31, 2022
5	Draft report of no more than 3 pages with details of their sample collection activities	Before January 15, 2022
Option 6	Final version of Study Manual and a final report of no more than 3 pages with details of their sample collection activities incorporating any EPA comments	Before the end of the Period of Performance for this Task Order (1 year from TO issuance)

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE		PAGE OF PAGES	
						1 6	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00001		See Block 16C		PR-ORD-22-00426			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
CAD							
US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x) 9A. AMENDMENT OF SOLICITATION NO.			
Westat, Inc. Attn: Susan Mountford 1600 RESEARCH BOULEVARD ROCKVILLE MD 208503129				9B. DATED (SEE ITEM 11)			
				x 10A. MODIFICATION OF CONTRACT/ORDER NO.			
				68HERD19D0001			
				68HERC21F0430			
				10B. DATED (SEE ITEM 13)			
CODE 049508120 FACILITY CODE				09/22/2021			
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
See Schedule				Net Increase:		\$42,948.79	
<b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
X	D. OTHER (Specify type of modification and authority) Unilateral - Addition of Incremental Funding						
<b>E. IMPORTANT:</b> Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
DUNS Number: 049508120							
TOCOR: Edward Hudgens Invoice Approver: Edward Hudgens Alt Invoice App: Amanda Boone							
The purpose of this modification is to add incremental funding in the amount of \$42,948.79 to Line Item 0001.							
All other terms and conditions remain unchanged.							
RECAPITULATION:							
Total Maximum Amount: \$333,638.00							
Total Amount without Options: \$288,097.00							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Mark Cranley			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				 (Signature of Contracting Officer)		12/29/2021	

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	68HERD19D0001/68HERC21F0430/P00001	2	6

NAME OF OFFEROR OR CONTRACTOR  
Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Initially Funded Amount: \$245,148.21 Funded Amount (This Action - Mod P00001): \$42,948.79 Funded Amount To Date: \$288,097.00</p> <p>LIST OF CHANGES: Reason for Modification: Funding Only Action Total Amount for this Modification: \$0.00 New Total Amount for this Version: \$288,097.00 New Total Amount for this Award: \$333,638.00 Obligated Amount for this Modification: \$42,948.79 New Total Obligated Amount for this Award: \$288,097.00 Incremental Funded Amount changed: from \$245,148.21 to \$288,097.00 BIB - Infrastructure Bill Funds changed to : N/A CHANGES FOR LINE ITEM NUMBER: 1 Obligated Amount for this Modification: \$42,948.79 Incremental Funded Amount changed from \$245,148.21 to \$288,097.00</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 21-22-C-26D5000-000FK7XR4-2532-26A6A-2226D5E005-001 1 Beginning FiscalYear 21 Ending Fiscal Year 22 Fund (Appropriation) C Budget Organization 26D5000 Program (PRC) 000FK7XR4 Budget (BOC) 2532 Job # (Site/Project) Cost Organization 26A6A DCN-LineID 2226D5E005-001 Quantity: 0 Amount: \$20,344.00 Percent: 7.06151 Subject To Funding: N Payment Address:</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 21-22-C-26D5000-000FK8XPV-2532-26A6A-2226D5E005-002 2 Beginning FiscalYear 21 Ending Fiscal Year 22 Fund (Appropriation) C Continued ...</p>				

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	68HERD19D0001/68HERC21F0430/P00001	3	6

NAME OF OFFEROR OR CONTRACTOR

Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Budget Organization 26D5000  Program (PRC) 000FK8XPV  Budget (BOC) 2532  Job # (Site/Project)  Cost Organization 26A6A  DCN-LineID 2226D5E005-002  Quantity: 0  Amount: \$17,747.76  Percent: 6.16034  Subject To Funding: N  Payment Address:</p> <p>NEW ACCOUNTING CODE ADDED:  Account code:  21-22-C-26D5000-000FK8XPW-2532-26A6A-2226D5E005-003  Beginning FiscalYear 21  Ending Fiscal Year 22  Fund (Appropriation) C  Budget Organization 26D5000  Program (PRC) 000FK8XPW  Budget (BOC) 2532  Job # (Site/Project)  Cost Organization 26A6A  DCN-LineID 2226D5E005-003  Quantity: 0  Amount: \$4,857.03  Percent: 1.6859  Subject To Funding: N  Payment Address:</p> <p>Payment:  RTP Finance Center  US Environmental Protection Agency  RTP-Finance Center (AA216-01)  109 TW Alexander Drive  www2.epa.gov/financial/contracts  Durham NC 27711  Period of Performance: 09/20/2021 to 09/19/2022  Delivery - Invoice Payment Schedule shall not exceed a frequency greater than once a month and 90% of the task order price. Acceptance for invoicing is based on deliverable approval by the TOCOR. For efficient processing IAW FAR clause 52.232-32, performance based payment invoicing amounts will not be submitted until the TOCOR provides deliverable approval. The TOCOR will Continued ...</p>				



<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	68HERD19D0001/68HERC21F0430/P00001	4	6

NAME OF OFFEROR OR CONTRACTOR  
Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	notify Westat within 14 days of submission of a deliverable of EPAs intention to approve or disapprove.  TOCOR and Invoice Approver: Edward E. Hudgens/Phone: 919-966-0642/E-mail: hudsons.edward@epa.gov Alt TOCOR and Invoice Approver: Amanda W. Boone/Phone: 202-564-7614/E-mail: boone.amanda@epa.gov				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES		
					13		
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00002		See Block 16C		PR-ORD-22-01854			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
CAD							
US Environmental Protection Agency							
26 West Martin Luther King Drive							
Mail Code: W136							
Cincinnati OH 45268-0001							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x)		9A. AMENDMENT OF SOLICITATION NO.	
Westat, Inc.							
Attn: Susan Mountford						9B. DATED (SEE ITEM 11)	
1600 RESEARCH BOULEVARD							
ROCKVILLE MD 208503129							
CODE		FACILITY CODE		x		10A. MODIFICATION OF CONTRACT/ORDER NO.	
NVUWAFWQ57S5						68HERD19D0001	
						68HERC21F0430	
						10B. DATED (SEE ITEM 13)	
						09/22/2021	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended.							
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
See Schedule Net Decrease: -\$13,600.29							
13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
CHECK ONE							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D. OTHER (Specify type of modification and authority)							
X Bilateral - Deobligation of funds							
E. IMPORTANT: Contractor <input type="checkbox"/> is not <input checked="" type="checkbox"/> is required to sign this document and return 1 copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
UEI: NVUWAFWQ57S5							
TOCOR: Edward Hudgens InvoiceApprover: Edward Hudgens Alt Invoice App: Amanda Boone							
The purpose of this modification is to deobligate excess funds in the amount of \$13,600.29 from Line Item 0001. The new funded amount for this Line Item is changed from \$288,097.00 to \$274,496.71. All other terms and conditions remain unchanged.							
LIST OF CHANGES:							
Reason for Modification: Funding Only Action							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Clare Hingsbergen			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				ELECTRONIC SIGNATURE		07/12/2022	
Previous edition unusable				(Signature of Contracting Officer)			

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED 68HERD19D0001/68HERC21F0430/P00002	PAGE	OF
		2	3

NAME OF OFFEROR OR CONTRACTOR  
Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Obligated Amount for this Modification: -\$13,600.29</p> <p>New Total Obligated Amount for this Award: \$274,496.71</p> <p>Incremental Funded Amount changed:    from \$288,097.00 to \$274,496.71</p> <p>Buyer changed   from Kaela Houser</p> <p>  to    Kaela Back</p> <p>Contracting Officer changed   from Mark Cranley</p> <p>  to    Clare Lawson Hingsbergen</p> <p>BIB - Infrastructure Bill Funds changed to :   N/A CHANGES FOR LINE ITEM NUMBER:   1</p> <p>Obligated Amount for this Modification: -\$13,600.29</p> <p>Incremental Funded Amount changed from \$288,097.00 to \$274,496.71</p> <p>CHANGES FOR ACCOUNTING CODE: 21-22-C-26D5000-000FK8XPV-2532-26A6A-2226D5E005-00 2</p> <p>Amount changed from \$17,747.76 to \$4,147.47</p> <p>NEW ACCOUNTING CODE ADDED: Account code:</p> <p>Beginning FiscalYear 00 Ending Fiscal Year Fund (Appropriation) ZERO Budget Organization DOLLAR Program (PRC) ADMIN Budget (BOC) REQ Job # (Site/Project) Cost Organization DCN-LineID Quantity: 0 Amount: \$0.00 Percent: 0 Subject To Funding: N Payment Address:       RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Continued ...</p>				

NAME OF OFFEROR OR CONTRACTOR  
Westat, Inc.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Durham NC 27711</p> <p>Payment:</p> <p> RTP Finance Center  US Environmental Protection Agency  RTP-Finance Center (AA216-01)  109 TW Alexander Drive  www2.epa.gov/financial/contracts  Durham NC 27711 </p> <p>Period of Performance: 09/20/2021 to 09/19/2022</p> <p> TOCOR and Invoice Approver: Edward E.  Hudgens/Phone: 919-966-0642/E-mail:  hudgens.edward@epa.gov  Alt TOCOR and Invoice Approver: Amanda W.  Boone/Phone: 202-564-7614/E-mail:  boone.amanda@epa.gov </p>				